Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts amendments to §§101.300, 101.302 - 101.304, 101.306, 101.370, 101.372 - 101.374, and 101.376.

Sections 101.300, 101.302 – 101.304, 101.370, 101.372 – 101.374, and 101.376 are adopted *with changes* to the proposed text as published in the March 24, 2017, issue of the *Texas Register* (42 TexReg 1335). Section 101.306 is adopted *without change* to the proposed text and, therefore, will not be republished. A correction of error notice regarding the proposal was published in the March 31, 2017, issue of the *Texas Register* (42 TexReg 1809).

The amended sections will be submitted to the United States Environmental Protection Agency (EPA) as revisions to the state implementation plan (SIP).

Background and Summary of the Factual Basis for the Adopted Rules

The Emissions Banking and Trading (EBT) program rules in Chapter 101, Subchapter H include market-based programs that provide sites with additional flexibility for complying with air regulations, such as the offset requirements in nonattainment new source review (NNSR) permits or the unit-specific emission limits in various state rules. Two of the EBT programs are voluntary programs designed to incentivize emissions reductions beyond regulatory requirements. In 1993, the commission adopted the emission reduction credit (ERC) rules in Subchapter H, Division 1 to allow sources in nonattainment areas to generate, bank, trade, and use credits from permanent

reductions in emissions. In 1997, the commission adopted the discrete emission reduction credit (DERC) rules in Subchapter H, Division 4 to allow sources throughout the state to generate, bank, trade, and use credits from emission reductions that exceed regulatory requirements.

Because the programs are market-based, the costs associated with trades of credits are not controlled. In response to recent increases in the cost and lack of availability of credits, there has been considerable interest from the regulated community for alternatives that facilitate credit generation and for flexibility in credit use, including options provided in the existing EBT rules that have historically not been used. Specifically, there has been interest in generating credits by reducing emissions from area (nonpoint) and mobile sources. However, staff research on the feasibility of generating area and mobile source credits indicated the need to address issues associated with ensuring that area and mobile source credits would meet EPA and federal Clean Air Act (FCAA) requirements.

As part of a prior rulemaking, based on the identified implementation issues, on December 10, 2014, the commission proposed to remove the provisions for generating ERCs and DERCs from area and mobile sources. The commission requested comment on the proposed removal and the associated impacts of removing the potential for generation of area source credits. Additionally, the commission requested comment from individuals who support retaining an area source credit program specifically regarding suggestions for how an area source ERC or DERC program could be

implemented in a manner consistent with EPA and FCAA requirements and minimize the burden to applicants. The commission subsequently received significant public comment opposing the removal of these area and mobile source credit provisions; however, although the commission asked for ideas for how we might implement the area or mobile source generation, none were received. At the June 3, 2015 Agenda, the commission retained the rules that allow area and mobile sources to generate credits. The commission emphasized that significant issues remain with generating credits from area and mobile sources in a manner consistent with federal requirements. In addition, the commission directed staff to identify potential viable options for generating credits from area and mobile sources or bring the issue back before them for potential removal. The commission also indicated that interested parties should engage with staff to discuss issues and potential options that would help to make retaining the area and mobile source generation of credits feasible. In meeting the commission's direction, staff worked with external parties, including the EPA, to identify a potentially viable solution for some area and mobile sources to generate credits. Staff also held open-participation meetings in July and December of 2016, and February and March of 2017, to present potentially viable approaches for area and mobile sources credit generation. Input from the meetings and received comments were taken into consideration in developing the adopted rulemaking.

Generating Credits from Area Sources

To meet federal requirements, ERCs must be generated from emissions reductions that are demonstrated to be real, quantifiable, permanent, enforceable, and surplus to the

SIP and all applicable rules, and DERCs must be generated from reductions that are real, quantifiable, and surplus to the SIP and all applicable rules. Though the existing rules allow an area source to generate emissions credits, the current methods for quantifying and authorizing area emissions make it challenging to demonstrate that the emissions reductions from area sources relied on for credits meet federal requirements.

Under the existing EBT rules, an area source is a stationary source that is not required to submit an annual emissions inventory (EI) under $\S101.10$ based on the quantity of emissions from the source (e.g., an account that emits less than 10 tons per year (tpy) of volatile organic compounds (VOC) or 25 tpy of nitrogen oxides (NO_x) in an ozone nonattainment area). Examples of area sources include, but are not limited to, upstream oil and gas production, small painting operations, gasoline stations, dry cleaners, and residential fuel combustion. Although emissions from area sources are relatively small, area sources are numerous enough to collectively emit significant quantities and must be accounted for in SIP planning and modeling. Area sources are too small and/or too numerous to be inventoried individually. For this reason, emissions from area sources are typically estimated using county-level information such as population, emission factors, and activity or production data. County-level emission estimates pose difficulties in demonstrating that a particular emission reduction from area sources is surplus to the emissions in the SIP modeling.

To effectively implement an area source EBT program, area source applicants would be

required to submit facility-specific emissions information with their application to be eligible to generate credits. To generate an ERC, an area source would be required to make the emissions reductions federally enforceable through permitting actions or other federally enforceable means. Many of these area sources are typically authorized with a permit by rule, which may not currently require registration. Satisfying these requirements may create a significant regulatory and financial responsibility for these area sources, which are typically small businesses. Additionally, processing and modeling these individual sources for air quality purposes would be extremely resource intensive due to the significant number of sources.

The commission adopts the rules to implement an area source program that is consistent with EPA and FCAA federal requirements.

Generating Credits from Mobile Sources

The existing rules allow a mobile source to generate ERCs from emissions reductions that are demonstrated to be real, quantifiable, permanent, enforceable, and surplus to the SIP and all applicable rules, and DERCs from reductions that are real, quantifiable, and surplus to the SIP and all applicable rules.

Mobile sources are categorized as on-road and non-road sources. The on-road sources include automobiles, buses, trucks, and other vehicles traveling on local and highway roads. Non-road sources are any mobile combustion sources typically used off road, such as locomotives, marine vessels, off-road motorcycles, snowmobiles, lawn/garden

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

equipment, and farm, construction, and industrial equipment.

The mobile source EI used in attainment demonstration SIP revisions relies on historical and future-year emission estimates. Since there are several million mobile sources in the state, it is unrealistic to have source-specific emission estimates in the SIP for each one. Also, since there is no registration database for non-road equipment, it is impossible to obtain a comprehensive set of source-specific data such as individual equipment owners, hours of use, model years of new purchases, ages of inuse equipment, etc. Instead, the commission uses computer models, such as the EPA's Motor Vehicle Emission Simulator and Texas NONROAD, to estimate the emissions from mobile sources based on fleet-average characteristics. The models used account for emissions reductions from mobile sources that are subject to the EPA rules for engine manufacturers. For these sources, the future-year emission estimates are usually lower than the historical emissions because of the ongoing fleet turnover benefits from replacing older higher-emitting engines with newer lower-emitting units that meet more stringent standards. Proving that an emission reduction from a specific mobile source is surplus to the SIP and not accounted for through fleet turnover poses challenges for potential applicants.

Federal law allows only the EPA and the State of California to establish engine certification standards for mobile sources. In the 1990s, when the EBT rules were first adopted, it was feasible to generate ERCs and DERCs from mobile sources because California standards were more stringent than the EPA standards, and there was not a

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

requirement for California-certified vehicles or equipment to be used in Texas. However, changes in federal emission standards have essentially aligned the EPA and California standards in regards to emissions certification for mobile sources. In addition, the burden of meeting on-road vehicle and non-road equipment emission standards falls with the manufacturer and not the purchaser. As long as the vehicle or equipment met the standards in place at the time it was manufactured, the owner may operate it in most parts of Texas for years without demonstrating that the equipment consistently meets the original emissions certification standards, although annual emissions testing is required for certain on-road sources in some areas.

The commission adopts this rulemaking to implement a mobile source program that addresses the legal and technical issues with generating credits from mobile sources.

Meeting Federal Requirements: Surplus

The adopted rulemaking revises the EBT program rules in Chapter 101 to address the implementation issues associated with crediting emissions reductions from area and mobile sources. The adopted rules ensure that area and mobile source credits are surplus to the emissions estimates used for SIP modeling by accounting for uncertainty in verifying the SIP emissions for an individual source. This uncertainty in verifying SIP emissions is produced by non-point EI estimation techniques, which do not quantify emissions on a source-level basis, and by mobile source fleet turnover assumptions used in the SIP.

The EPA requires source-specific integrity elements to be a part of any economic incentive program, like the commission's EBT program (*See* Improving Air Quality with Economic Incentive Programs EPA-452/R-01-001). During the development of the adopted rule amendments, questions were raised about what makes emissions surplus for purposes of generating emission credits. Surplus means that source-specific emissions reductions adopted for credit generation are not relied upon in the current SIP, or are not required by some other legal requirement, like a consent decree, permit requirement, or rule. Specifically, baseline emissions cannot exceed emissions in the most recent modeling in the attainment demonstration or the EI for other types of SIP revisions.

These emissions are represented in an attainment demonstration primarily in the EI. The EI can be broken down into the point source EI, the area source EI, and the mobile source EI. Due to different requirements for the different types of sources, each EI is developed differently. Point sources are required to keep records and report their actual emissions for the point source EI on an annual basis to the TCEQ. The area source EI is developed from activity data, surveys, and population-based estimates; consequently, this EI has more general information about the types of area sources located in the nonattainment area instead of source-specific information. The mobile source EI is developed from EPA models and refined by the state. The inputs for these models are developed from various contract activities and surveys. Just as in the area source EI, the mobile EI does not contain specific information about specific sources; rather, it has more general information about the types of mobile sources located in

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

the nonattainment area.

To generate credits, facilities must demonstrate that the achieved emissions reductions are surplus to the emissions accounted for in the attainment demonstration (that they are "surplus to the SIP"). For facilities at point sources, this generally means the emissions that are reported to the commission and included in the EI that is used in the attainment demonstration modeling for the nonattainment area. Therefore, a facility at a point source may not generate a credit for more emissions than were included in the attainment demonstration EI for that particular facility. For area and mobile sources, however, the comparison is more complicated because these sources are not individually accounted for in the SIP EI. Instead, the commission has developed strategies in this adopted rulemaking to address these issues.

For area and mobile sources, the adopted rule has a two-tiered system to provide flexibility for sources that may want to generate credits, while ensuring that any reductions used to generate credits are surplus to the SIP, as required. First, the adopted rule will limit the total amount of credits that are available from the represented area and mobile source inventories in the applicable nonattainment area. Reserving a portion of the area and mobile EI that will not be eligible for credit generation ensures that the commission does not issue credits in excess of emissions estimates utilized in the SIP. The second tier may require the total amount of credits an area or mobile source can generate from their emission reduction to be adjusted based on the reduction strategy and the quality of emission estimation data, if such a

strategy must be sent to EPA for approval. This accounts for the uncertainty in area and mobile source emission estimates as well as potentially different recordkeeping and reporting requirements for these sources. The two tier approach is also intended to account for uncertainty related to the possibility that a similar source may replace the shutdown facility in the airshed. Unlike point sources, area sources (as defined in the EBT rules) and mobile sources do not have to report annual emissions to the commission. Additional requirements are being instituted for mobile sources, which have an inherently limited useful life that is already specifically accounted for in the mobile source EI through factors such as fleet turnover, which ultimately result in future emissions reductions.

Meeting Federal Requirements: Real, Permanent, Enforceable, and Quantifiable

The adopted rules ensure that the reductions used to generate area and mobile source credits are real by restricting credit generation from inelastic sources (i.e., gas stations, dry cleaners, restaurants, etc.) and disallowing credit generation from certain activities that do not result in actual emissions reductions, such as the replacement of a mobile source that is not capable of being operated as intended. To account for the potential overall increase in nonattainment area emissions from shifting activity to meet market demand vacated by a source that generated credits, the adopted rules also require an adjustment to the issued credits. The adopted rules ensure that the reductions used to generate area and mobile source credits are permanent and enforceable by requiring that credited reductions are certified through federally enforceable agency documentation processes. The adopted rules ensure that area and mobile source

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

credits are quantifiable by accounting for the uncertainty in the emission calculation

techniques adopted for area and mobile sources.

Section by Section Discussion

General Revisions

The commission adopts grammatical, stylistic, and other non-substantive changes to

update the rules in accordance with current Texas Register style and format

requirements, improve readability, establish consistency in the rules, and conform to

the standards in the Texas Legislative Council Drafting Manual, August 2016. These

non-substantive changes are not intended to alter the existing rule requirements in any

way and are not specifically discussed in this preamble.

Division 1: Emission Reduction Credit Program

§101.300, Definitions

An amendment to §101.300(4), the definition for "Baseline emissions," is adopted for

more consistent use of terminology. The adopted amendment conforms the definition

to the program's current practice of assessing credit generation possibilities based on

the emissions reduction at a particular facility.

The definition for emission reduction at §101.300(9) is modified for clarity.

The definitions for "Historical adjusted emissions," "Mobile emission reduction credit,"

"Mobile source," and "Mobile source baseline emissions" at §101.300(14) - (16) and (18), respectively, are amended to facilitate program implementation by increasing consistency in the procedures used for stationary and mobile sources. The revised definition for historical adjusted emissions would apply to both stationary and mobile sources. The revised definition for mobile emission reduction credit (MERC) requires that MERCs be expressed in tenths of a tpy and allows MERCs to be generated from groups of mobile sources. A mobile source is defined as any source included in the agency EI under the mobile source category, and mobile source baseline emissions are defined as the lowest of the source's historical adjusted emissions or SIP emissions.

A definition of "Point source" is adopted as §101.300(21) to specify sources that are not area or mobile. A point source is defined as any facility included in the agency's EI under the point source category.

A definition of "Primarily operated" is adopted as §101.300(22) to specify how to determine when a mobile source is operated often enough in a specific nonattainment area for reductions to be creditable. To provide operators some flexibility while still focusing program activity on sources that impact the relevant air shed, mobile sources are to be considered primarily operated in a specific nonattainment area if at least 75% of their activity occurs in that area. In response to comments, the percentage that mobile sources are to be considered primarily operated in a specific nonattainment area is changed from at least 85% at proposal to at least 75% for adoption.

A definition for "Projection-base year" is adopted as §101.300(23) to clarify the year in which a point source facility must be in operation in order to potentially qualify to generate an emissions credit. The subsequent definitions are renumbered accordingly.

At renumbered §101.300(26), the definition of "Real reduction" is amended to clarify that reductions from the following are not creditable: lowering the permit allowable emission limit without a physical change or change in method of operation; shifting a vent gas stream or other pollution or waste stream to another site; a mobile source that is not capable of being operated as intended; or a change in the emissions factor or emissions calculation equation. The purpose for this adopted revision is to ensure that emissions from credited reductions are real and do not return to the air shed from the generating source or by redirecting the source of the emissions to another site.

At §101.300(30), the definition of "State implementation plan (SIP) emissions" is replaced to clarify that the definition applies to facilities at point or area sources and to mobile sources. The adopted changes to this definition are not intended to alter how SIP emissions are determined for point sources except in cases without an applicable SIP revision. For newly designated nonattainment areas, in the interim before a SIP revision has been submitted for that area, the SIP emission year would be the year of the National Emissions Inventory (NEI) most recently submitted to the EPA prior to that area's nonattainment designation. It should be noted that any credits generated prior to a SIP revision for a newly designated nonattainment area could

potentially be devalued if the SIP submission for that nonattainment area relies on a different emissions year.

The adopted changes establish that, for area and mobile sources, SIP emissions are actual emissions in the year of the latest TCEQ-generated NEI used to support the applicable SIP revision. In addition, the definition of SIP emissions is revised to specify that, for area and mobile sources, credits will only be generated for actual emissions from each source, as verified by records provided with or reviewed for the application. Emission credits will not be issued beyond the amount of actual emissions from a source during the latest NEI year used to support modeling in the applicable SIP revision, not to exceed any applicable local, state, or federal requirement, as calculated using the best available data. For example, the latest NEI year used to support SIP modeling for both the Dallas-Fort Worth (DFW) and Houston-Galveston-Brazoria (HGB) nonattainment areas is from 2014. Thus, the SIP emissions for an area or mobile source would be the source's actual emissions from Calendar Year 2014. As such, an area or mobile source must have been operated during 2014 to be eligible for credit generation under the current applicable SIP revision.

For the area, on-road mobile, and non-road mobile source categories, the commission reduced the total amount of SIP emissions eligible for credit generation to mitigate uncertainties associated with the emission estimates, which are generally not based on source-specific data. In practice, the commission will determine the SIP emissions available for potential credit generation by reducing the total value in the applicable

SIP revision by: 25% for area (excluding residential) and non-road mobile sources (75% of SIP emissions for these categories is available for credit generation); and 15% for the on-road mobile source category (85% of SIP emissions for this category is available for credit generation). After the initial set-aside is accounted for, the commission will make the pool of remaining emissions available for credit generation.

Finally, the SIP emissions definition is revised to establish that the applicable SIP revision for determining the SIP emissions will be set in the order of SIP revisions listed in adopted §101.300(30)(B) and (E). This will facilitate program implementation by setting the applicable SIP revision for area and mobile sources in a manner that is consistent with the treatment of point sources.

§101.302, General Provisions

Amended §101.302(a)(1) and (2) are adopted to facilitate program implementation by increasing consistency in the procedures used for stationary and mobile sources as both types of emission credits (ERCs and MERCs) are adopted to be eligible for interpollutant trading as provided by §101.306(d).

Amended §101.302(b)(1) and (3) are adopted to clearly specify that facilities at both point and area sources are eligible to generate emission credits. Language is adopted in §101.302(c)(1) - (4) to specify that the following types of sources cannot generate credits: residential sources; sources that do not have records to support approved or approvable methods to quantify emissions; on-road mobile sources that are not part of

an industrial, commercial, nonprofit, institutional, or municipal/government fleet; and mobile sources that do not primarily operate within a specific nonattainment area; resulting in the subsequent subsections being re-lettered. These categories are restricted from generating credits as these sources are not expected to meet the federal requirements regarding emissions reductions being real, surplus, and quantifiable. An exception is provided to the ineligibility requirement related to primarily operating in a specific nonattainment area to allow flexibility for generating credits from marine and locomotive sources that use capture and control emissions reduction systems.

Under adopted §101.302(c)(2), the types of records expected include documentation of the characteristics taken into consideration to estimate emissions, such as activity level, emission flow rate, pollutant concentration, etc. The approved or approvable methods required include previously EPA-approved protocols or protocols submitted to EPA for approval under adopted §101.302(e).

Re-lettered §101.302(d)(1) and (2) is revised to introduce the acronyms ERC and MERC in this section. To ensure creditable emissions reductions are surplus as required, language is revised at re-lettered §101.302(d)(1)(C) and (2)(C) - (E) to specify, respectively, that facilities and mobile sources cannot generate credits unless the reduction occurred during or after the SIP emissions year and the sources were operated in the applicable nonattainment area during the SIP emissions year. In response to comments, the word "individual" was removed in adopted

§101.302(d)(1)(C). Comments indicated that the word "individual" in §101.302(d)(1)(C) and (f)(1) and §101.372(d)(1)(C) and (g)(1) resulted in a restrictive reading regarding what actions are available to the commission. Under certain circumstances, the commission treats multiple emission points as a single unit equivalent to a facility. Examples include, but are not limited to, some coating operations, storage tanks that are routed to a joint control device, and other groupings of similar equipment. For the purposes of generating an ERC or DERC for an area source, the commission may consider these grouped emission points to be a single facility, and may certify credits from the grouped emission points so long as the total grouping has emissions equal to or greater than 0.1 ton or tpy, even if points within the group have emissions of less than 0.1 ton or tpy. Credit generation cannot exceed the group's actual emissions in the SIP emissions year or the historical adjusted emissions years and such a group may include equipment that was not operational during the SIP emissions year or the historical adjusted emissions years.

To ensure creditable emissions reductions are quantifiable as required, language is adopted in re-lettered §101.302(e)(1)(C) to specify that, except as specified in §101.302(e)(1)(A) and (B), the owner or operator of a source subject to 30 TAC Chapter 106 or a permit issued under 30 TAC Chapter 116 must use the required testing and monitoring methodologies that apply to its facilities to show compliance with the applicable requirements. The subsequent subparagraphs are re-lettered.

To facilitate efficient program implementation, language is added as adopted

§101.302(f)(1) to specify that the minimum credit the commission will issue will be 0.1 ton per year. A facility, aggregated fugitive emissions, or aggregated mobile sources (for the same pollutant and reduction date) incapable of generating at least 0.1 ton per year of credit after all adjustments are applied cannot generate emission credits. In response to comments, the word "individual" was removed in adopted §101.302(f)(1). As discussed elsewhere in this preamble, comments indicated that the word "individual" at §101.302(d)(1)(C) and (f)(1) and §101.372(d)(1)(C) and (g)(1) resulted in a restrictive reading regarding what actions are available to the commission. As noted elsewhere in this preamble, under certain circumstances, the commission treats multiple emission points as a single unit equivalent to a facility and the commission may consider grouped emission points to be a single facility for the purposes of generating an ERC or DERC for an area source.

It is also adopted that fugitive emissions or mobile source emissions aggregated to meet the requirement that emission reductions be certified for at least 0.1 ton per year must be represented on the same application and will have an application deadline and credit expiration date determined by the earliest emission reduction date among the aggregated sources. Language is added as adopted §101.302(f)(2) to facilitate program implementation by increasing consistency in the procedures used for ERCs and MERCs. In §101.302(f)(3), a citation is updated to reflect adopted changes elsewhere in the rule.

To assist in facilitating efficient submittal and processing of credit applications language is added as adopted §101.302(g) to specify that, beginning January 1, 2018,

all credit applications must be electronically submitted through the State of Texas Environmental Reporting System (STEERS) unless an applicant receives prior approval from the executive director for an alternative form of application submission, that the executive director may specify monitoring, testing, recordkeeping, or other requirements, and that the generator must comply with all conditions specified by the executive director once the credit is certified. The records required could include documentation of the characteristics taken into consideration to estimate emissions. such as activity level, emission flow rate, pollutant concentration, etc. For area and mobile sources without NNSR permits, credit certification may be contingent upon implementation of monitoring, testing, recordkeeping, and reporting that would be documented and made federally enforceable as special conditions in an EBT certification form. Lack of compliance with a special condition documented in an EBT certification form constitutes a violation and could result in an enforcement action against the credit generator, including but not limited to, the need to provide additional emissions reductions to replace the voided emissions credits. For example, if an emissions credit is issued for a mobile source that has been destroyed, and the vehicle/equipment is later discovered back in that area, the generator would be considered in violation of a federally enforceable special condition listed in their EBT certification. In this case, the generator could be liable to replace the emissions credits and potentially be subject to other penalties for noncompliance.

To ensure that creditable emissions reductions are permanent and enforceable as required, language is adopted in re-lettered §101.302(i) to specify that records

necessary to verify the certified emissions reduction must be kept for a minimum of five years. This is intended to include records associated with the credit generation application as well as any records required to demonstrate implementation of any monitoring, testing, or other special conditions included on an EBT certification. Maintaining these records is necessary to show on-going compliance with a creditrelated special condition, and the credit generator may be required to create records for the life of the reduction strategy. For example, an EBT certification may require ongoing tracking of vehicle usage for the useful life of the credit-generating vehicle by the credit generator. The generator in this case would be required to maintain records of the vehicle usage for five years after the date each record was created. For records in conjunction with the ERC life being expanded to 72 months, the records associated with generating the ERC would be required to be kept for six years and this requirement would be annotated on the EBT certification. These records must be kept longer than the minimum of five (or six) years, if necessary on a case-by-case basis as specified in an Emissions Banking and Trading Certification of Emission Reductions Form (Form EBT-CERT) to ensure compliance.

An amendment to re-lettered §101.302(n)(2) is adopted to use consistent units throughout the rules and implement consistent requirements regarding emission credits being issued for no less than 0.1 ton per year, which is adopted to apply after any adjustments.

§101.303, Emission Reduction Credit Generation and Certification

To ensure creditable emissions reductions are real and not associated with the shifting of activity from one source to another, language is adopted as §101.303(a)(2)(D). The adopted requirement prohibits credit generation from the shutdown of area source types that are inelastic, highly interchangeable, and driven by population needs. The assessment of what constitutes a source that is driven by population needs will consider characteristics such as, but not limited to, whether this type of source commonly closes when population declines in its vicinity or if this source ceased operations, would another source of this type open to meet population needs. This requirement is adopted for area sources because the regulatory requirements are potentially less stringent for the markets they serve. In many cases, there are more significant economic (capital cost) or regulatory (emission offset, registration requirements, etc.) requirements for markets served by point sources making it less likely that a new source will readily open (and re-introduce emissions) to meet market demand created from the closure of another source. Examples of source categories that the commission considers to be inelastic sources include gas stations, restaurants, dry cleaners, and concrete batch plants. However, the commission cannot provide an exhaustive list of all possible inelastic area sources at this time. Additionally, the commission acknowledges that owners of area sources need a reasonable means of knowing which area sources are eligible for credit generation and which are not. Therefore, subparagraph (D) directs the executive director to maintain a list of area sources considered to be inelastic and not eligible for credit generation. The adoption implements a process in which the list of inelastic area source types will be made available to the public on the commission's website; any person may submit a written

petition to the executive director requesting to add or remove a category from the list; within 60 days of receiving a petition the executive director will prepare a draft revised list or propose denial of the petition by preparing a draft denial statement supporting denial of the petition; the executive director will make the draft revised list, or draft denial statement, available for public comment for 30 days; within 30 days of the public comment period ending, the executive director will issue a proposed final list or a proposed final denial statement for consideration and approval by the commission; the commission will approve, modify, or deny the proposed revisions to the list of inelastic area sources categories made by the executive director; the commission will approve, modify, or remand to the executive director for further consideration a recommendation to deny a petition submitted by the executive director; and an ERC would not be issued or denied for an area source category petitioned to be added or removed from the inelastic list until final determination of the petition is made by the commission. Through this rulemaking the commission is establishing the initial list of inelastic sources that are ineligible to generate emissions credits for shutdowns as gas stations, restaurants, dry cleaners, and concrete batch plants.

In §101.303(b)(2), language changes are adopted to specify that the activity and emission rate used to calculate historical adjusted emissions must be determined from the same two consecutive calendar years for facilities at both point and area sources. Adopted language is added to require that the "lookback" for area sources be the five years immediately before the emissions reduction is achieved unless detailed operational records are available for more than five years. The lookback period for an

area source may be up to ten years immediately before the emissions reduction when detailed operational records are available for those years. If an applicant has ten years of detailed records, the lookback period could be ten years, but if the applicant only has eight years of detailed records, then the lookback period would only be eight years. This distinction between the lookback period for point and area sources is intended to ensure that the air shed realizes actual emissions reductions from the actions used to generate credits by reducing the circumstances in which credits could be issued for inherent emissions reductions and to address the uncertainties associated with emissions estimations for area sources, which are generally not required to have a case-by-case air authorization and do not perform annual EI reporting.

As §101.303(c) is expanded, existing §101.303(c) is re-lettered as §101.303(c)(1) for clarity. Language is adopted in §101.303(c)(2) to establish a 15% adjustment to the amount of credits generated for area source shutdown actions, with an adopted minimum reduction of 0.1 ton per year. Language is adopted in §101.303(c)(3) to establish a 15% adjustment for records to support approved alternative methods to quantify emissions (minimum 0.1 ton per year reduction). No adjustment would be required when the area source has the same type of emissions records that are required to be maintained by regulation or authorization for a facility operating as a point source or as a component of a point source. Non-substantive clarifying changes from the proposed §101.303(c)(3) regarding the use of the term "facility" and to add a more specific cross- reference are made to the adopted paragraph. Language is

adopted as §101.303(c)(4) to establish that the total combined adjustment shall be at least 0.1 ton per year and no more than 20%, if the facility is subject to an adjustment based on both the reduction strategy being a shutdown and the quality of the data used to quantify the emissions. The total adjustment is limited to 20% to prevent the adjustment from becoming a disincentive to participation in credit generation. As with the exclusion of inelastic (highly interchangeable) area sources whose activity is driven by population based market demand, the adjustment to the quantity of credits issued for the shutdown of an area source is adopted as a means to account for the potential overall increase in nonattainment area emissions from potential shifting of activity. This adjustment is adopted to account for the possibility that some unanticipated or undetected shifting of emissions may occur from the shutdown of sources that are not inelastic. The adjustment to the quantity of credits issued based on the quality of the data used to determine the emissions is adopted as a means to account for the uncertainty associated with emissions estimation techniques for area sources.

In §101.303(d)(1), language reorganization and changes are adopted to specify that applications for ERCs must be signed by an authorized account representative and submitted in most cases no more than two years after the reduction in the facility's actual emissions occurs. The existing provisions of §101.303(d)(1) regarding review to determine creditability and certification of reductions are relocated to adopted §101.303(d)(1)(A). The language at §101.303(d)(1)(B) is adopted to facilitate program implementation by ensuring that credit generation possibilities are assessed in most cases based on when the emissions reduction occurs at a particular facility.

To facilitate program implementation, the facility-specific emissions reduction date will be used in most cases to set both that facility's credit application deadline and the credit expiration date. For example, when an oil and gas production site ceases operation, the emissions from the various facilities (compressors, dehydrators, and sweeteners, tanks, fugitives, etc.) usually end at different times, potentially resulting in multiple credit application deadlines and expiration dates. Specifically, when gas production stops, the compressor, dehydrator, and sweetener would soon stop being used and emitting. The crude oil, condensate, and produced water tanks would stop having flash gas and working loss emissions soon after production stops, but breathing losses would continue until they are cleaned or removed. Breathing losses would decline after the product or waste is removed, corresponding to the final disposition date reported to the Railroad Commission of Texas. After that, the only breathing losses would be from residual material volatizing. Fugitive emissions would continue until piping is drained. The date each facility's emissions ended would set that facility's credit application deadline and expiration date. The generator could choose to consolidate the credits into one application and/or ERC certificate by using the earliest emission reduction date if all the grouped facilities use the same baseline years. Well plugging may be completed after the application deadline. However, to ensure compliance with the federal requirements for demonstrating that credited emissions reductions are real and permanent, the closure of individual facilities at an oil and gas production site that is ceasing operations cannot be credited until the well is plugged.

The credit application deadline and expiration date will be set in the same manner as described earlier when emissions are reduced at an individual facility that is part of a site with on-going operations. For example, if a tank at an oil and gas production site that is still producing is taken out of service and the material is piped to another authorized tank, the emission reduction associated with the first tank's removal, less any emissions increase from the second tank, could be credited. In this case, because operations are on-going, well plugging would not be required.

The commission is adopting incentives for emission credit generation from oil and gas production sites that expeditiously plug wells. To encourage expedited oil and gas well plugging, the adopted rule includes a limited exception, at §101.303(d)(1)(C), to the standard requirements for credit application deadlines. Adopted §101.303(d)(1)(C) also provides an exception to the standard credit life when specific criteria are met. Oil and natural gas production is a significant portion of the Texas economy and is highly dependent on the price volatility of oil and natural gas, leading in some cases to operators abandoning wells without plugging them. The problem of abandoned unplugged wells is a state priority primarily addressed by the Railroad Commission of Texas through bonding requirements which provide funding for state directed plugging for abandoned wells that are causing or may cause pollution. Because abandoned wells have potential environmental consequences to air and groundwater in addition to other nuisance conditions, the commission has determined that it is appropriate to provide additional incentives in the EBT program to assist in mitigating

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

the number of wells that are abandoned and not plugged.

The adopted provision at §101.303(d)(1)(C) allows credit generation applications for facilities affected by a complete production site shutdown to be submitted two years after the site's production well is plugged (as opposed to two years after the individual facility's emission reduction date) when the well is plugged in accordance with the technical specifications required by the Railroad Commission of Texas and when the plugging is completed within one year of final production being reported to the Railroad Commission of Texas. Emission credits certified under this exception are adopted to be available for use for 72 months from the date well plugging is completed. The "lookback" for establishing historical adjusted emissions will be set based on the same date used to set the credit application deadline and expiration. Use of the well plugging date instead of each facility's individual emission reduction date to set the credit application deadline and expiration date for efficiency to the applicant. In addition, the opportunity for an additional year of use may add to the market value of the credit.

The adopted provisions at §101.303(d)(1)(D)(i) and (ii) establish the following temporary application deadline provisions for area source facilities: for emissions reductions that occurred after June 1, 2013 and prior to January 1, 2015, the application for ERCs must be submitted by December 31, 2017; and for emissions reductions that occurred between January 1, 2015 and January 1, 2017, the application for ERCs may be submitted up to three years after the reduction in the facility's actual

emissions occurs. As adopted in §101.303(d)(1)(D)(iii), these temporary application deadline extensions will no longer apply after December 31, 2019. Adopted §101.303(d)(1)(D)(iv) allows emission credits certified under these temporary application deadline extensions or certified for area source emission reductions occurring and included on an application submitted, but not acted on, before January 1, 2017 to be available for use for 72 months from the date of the emission reduction in lieu of the 60 months outlined in §101.309(b)(2).

These temporary extensions of the credit application deadline and availability are adopted to support the transition to the adopted requirements, which provide a viable path for processing area and mobile source credit applications. The adopted specific dates are based on the anticipated effective date of this adopted rule revision and the timeframe in which review of area and mobile source credit generation applications has been deferred. In December 2014, the commission proposed, but did not adopt, to remove the provisions for generating ERCs and DERCs from area and mobile sources and the agency has not processed area and mobile source credit generation applications since that time. Some potential applicants have communicated that they did not invest in developing credit generation application materials because the agency is not processing area and mobile source applications.

Prior to the December 2014 proposed rule revisions, the deadline for application submission was 180 days from the emission reduction. Thus, emission reductions that occurred prior to June 1, 2013 should have already been included in a submitted

application by the point at which the deferral of application processing began, so an extension of the application deadline is not appropriate for these situations. The end date for emissions reductions covered by §101.303(d)(1)(D)(i) (January 1, 2015) and the application deadline for emissions reductions covered by §101.303(d)(1)(D)(i) (December 31, 2017) are based on the intention of providing potential applicants who may have been influenced by the deferral of application review since December 2014 with a reasonable amount of time to prepare a technically complete application following the completion of this rulemaking.

The additional year adopted to be allowed for emissions reductions that occurred between January 1, 2015 and January 1, 2017 in §101.303(d)(1)(D)(ii) is included to facilitate program implementation. While potential applicants with emission reductions in this time period may be able to prepare adequate applications by the two-year application deadline based on the requirements in this adoption, it is anticipated that providing additional application preparation time after rule adoption to those who may have been influenced by the deferral of application review will result in more technically complete application packages, facilitating efficient review. As the market value of a credit can be influenced by the time remaining until the credit expires, the temporary credit availability extension adopted at §101.303(d)(1)(D)(iv) is included to avoid penalizing applicants influenced by the deferred application processing.

The temporary extensions of the credit application deadlines and availability are

intended to improve the viability of credit generation for applicants influenced by the deferred application processing. The commission does not expect that these limited exceptions to the standard application and credit use deadlines will result in adverse air quality impacts because they will result in only a small number of credits being generated (given the requirement for the timing of the emission reduction and the limited timeframe for the exceptions). In addition, the commission expects that any air quality impacts of these limited exceptions will be minimal because all area and mobile source applications that experienced deferred application review will be subject to the requirements adopted as a result of this rulemaking.

In §101.303(d)(2), citations are updated to reflect adopted changes elsewhere in the rule.

Language is adopted in §101.303(d)(3)(E) to clarify that the requirement to include self-reported EI data for the years used to determine the SIP and historical adjusted emissions is only for point sources, as area sources are not required to report to the EI.

In §101.303(d)(4)(C), language changes are adopted to replace agreed orders with a new EBT certification form to make credited emissions reductions enforceable. The new form will be required whenever a New Source Review permit is not available to document the special conditions associated with the creditable emissions reduction and may be used with a Certification of Emission Limits (Form APD-CERT) when a Form APD-CERT is used to certify an emissions limit. The EBT certification form is being

adopted to facilitate more efficient program implementation, rather than the use of agreed orders, which require individual commission actions.

Point and area source applicants that are not authorized by a NNSR permit and use Form APD-CERT to certify an emissions limit for credit generating purposes will now be required to submit that form via the commission's e-permitting system. This new requirement, to submit the Form APD-CERT via the commission's e-permitting system, facilitates credit generation application processing since the e-permitting system automatically assigns a registration number to the applicant. The certification made in a permit modification or on Form APD-CERT and an EBT certification form makes the reductions federally enforceable.

§101.304, Mobile Emission Reduction Credit Generation and Certification

Language is revised at §101.304(a)(1) to make MERC requirements consistent with ERC requirements, which allow the executive director, instead of the commission, to approve an ERC certification.

Language is adopted as §101.304(a)(2)(D) to specify that MERCs cannot be generated from the shutdown or replacement of a mobile source unless that source is rendered permanently inoperable or permanently removed from North America to ensure that the credited emissions reduction is real and permanent. Allowing the operators of a mobile source to make the source permanently inoperable or permanently removed from North America provides flexibility for resale while minimizing the risk to the

requirement that the credit emissions reduction be real and permanent.

Language is adopted to replace existing §101.304(b)(2), and add §101.304(b)(3) and (4), to specify the timing and location considerations for setting the SIP and historical adjusted emissions for a mobile source. These restrictions are adopted to ensure that credited emissions reductions meet the requirements to be real in terms of the relevant air shed by limiting baseline emissions to those that occurred within a specific nonattainment area. Existing §101.304(b)(3) is renumbered as subsection (b)(5).

The mobile source historical adjusted emissions must be determined from the activity and emission rates for the same two consecutive calendar years. Language is adopted to require that the lookback be the five years immediately before the emissions reduction is achieved unless detailed operational or emissions records are available for more than five years. The lookback period for a mobile source may be up to ten years immediately before the emissions reduction when detailed operational records are available for those years and do not demonstrate decreasing use due to vehicle age or inoperability. If an applicant has eight years of detailed operational records, the lookback period would only be eight consecutive years. The adopted lookback period requirement for mobile sources is intended to ensure that the air shed realizes actual emissions reductions from the actions used to generate credits by reducing the circumstances in which credits could be issued for inherent emissions reductions (such as diminished use of an older vehicle) and to address the uncertainties associated with emission estimation for mobile sources, which are not required to have

an air authorization or perform annual EI reporting. In addition, it is adopted that a single year of data might be used with executive director approval for vehicles with less than two years use in the nonattainment area.

Language is revised in §101.304(c) to specify that strategic emissions are based on when the source is operating in a specific nonattainment area. The revision also adds adjustments to the MERC calculation related to the reduction strategy being a shutdown or the quality of the data used to quantify the emissions. The revisions to §101.304(c) are adopted as a means to account for the potential overall increase in nonattainment area emissions from shifting activity and to account for the uncertainty associated with emissions estimation methods for mobile sources.

Language is adopted as §101.304(c)(1) to establish a reduction of 15% or 0.1 ton per year, whichever is greater, to the amount of credits generated for mobile source shutdown actions. Language is adopted as §101.304(c)(2) to establish a reduction of 15% or 0.1 ton per year, whichever is greater, for records supporting approved alternative methods for quantifying emissions. Non-substantive clarifying changes are made at adoption to §101.304(c)(2) to more specifically cross-reference the provision regarding alternative methods. Language is adopted as §101.304(c)(3) to establish that the total combined reduction will be 20% or 0.1 ton per year, whichever is greater, if the mobile source is subject to an adjustment based on both the reduction strategy being a shutdown and the quality of the data used to quantify the emissions. The total adjustment is limited to 20% to prevent the adjustment from becoming a disincentive

to participation in credit generation. The adjustment to the quantity of credits issued for the shutdown of a mobile source is adopted as a means to account for the potential overall increase in nonattainment area emissions from shifting of activity. The adjustment to the quantity of credits issued based on the quality of the data used to determine the emissions is adopted as a means to account for the uncertainty associated with emissions estimation techniques for mobile sources.

In §101.304(e)(1), language reorganization and changes are adopted to specify that applications for MERCs must be signed by an authorized account representative and submitted in most case no more than two years after the reduction in the mobile sources actual emissions occurs. The existing provisions of §101.304(e)(1) regarding review to determine creditability and certification of reductions are relocated to §101.304(e)(1)(A). The adopted provision at §101.304(e)(1)(B) conforms the application deadline requirement to the program's current practice of assessing credit generation possibilities based on when the emissions reduction occurs for the mobile sources.

The adopted provisions at §101.304(e)(1)(C)(i) and (ii) establishes the following temporary application deadline provisions for mobile sources: for emissions reductions that occurred after June 1, 2013 and prior to January 1, 2015, the application for MERCs must be submitted by December 31, 2017; and for emissions reductions that occurred between January 1, 2015 and January 1, 2017, the application for MERCs may be submitted up to three years after the reduction for the mobile sources actual emissions occurs. As adopted in §101.304(e)(1)(C)(iii), these temporary

application deadline extensions will no longer apply after December 31, 2019. Adopted §101.303(e)(1)(C)(iv) allows emission credits certified under these temporary application deadline extensions or certified for mobile source emission reductions occurring and included on an application submitted, but not acted on, before January 1, 2017 to be available for use for 72 months from the date of the emission reduction in lieu of the 60 months outlined in §101.309(b)(2).

The adopted provisions in §101.304(e)(1)(C)(i) - (iv) for mobile sources are consistent with the adopted changes in §101.303(d)(1) for area sources. As discussed in the Section by Section Discussion portion of this preamble regarding §101.303(d)(1), the adopted limited extensions for credit applications and availability are intended to support the transition to the adopted requirements, which provide a viable path for processing area and mobile source credit applications. As with adopted §101.303(d)(1), the dates in adopted §101.304(e)(1) are based on the anticipated effective date of this rule revision and the timeframe in which area and mobile source credit application review has been deferred following the December 2014 commission proposal to remove the provisions for area and mobile source ERCs and DERCs.

The temporary extensions of the credit application deadlines and availability are intended to improve the viability of credit generation for applicants influenced by the deferred application processing. The commission does not expect that these limited exceptions to the standard application and credit use deadlines will result in adverse air quality impacts because they would result in only a small number of credits being

generated (given the requirement for the timing of the emission reduction and the limited timeframe for the exceptions). In addition, the commission expects that any air quality impacts of these limited exceptions would be minimal because all area and mobile source applications that experienced deferred application review will be subject to the requirements adopted as a result of this rulemaking.

In §101.304(e)(2), language changes are adopted to update references.

Language is adopted as §101.304(e)(3) to specify that the amount of credits issued for an individual mobile source will be adjusted based on its remaining useful life to ensure the credits are surplus to the fleet turnover assumptions used in the applicable SIP revision. The amount of credits certified for the mobile source emissions reduction is adopted to be annualized over 25 years. This requirement is adopted based on program experience that most credits are used to comply with stationary source offset requirements. The 25 years used to annualize the total emissions reductions is a reasonable amount of time that represents the expected operation of a generic point source. This process simplifies program implementation by ensuring that MERCs are eligible to be used as offsets, the most common use. The expected remaining useful life is determined based on assumptions included in the applicable SIP revision, such as, but not limited to, parameters used in the on-road mobile model and in the Texas non-road model for calculating fleet turnover. While the commission anticipates that nearly all types of mobile sources are reflected in the models, any mobile source not reflected in these models will be handled on a case-by-case basis, as approved by the

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

executive director.

Language is adopted as §101.304(e)(4) to provide an exception to the requirements to consider the expected remaining useful life of the mobile source and to annualize the emissions reduction over 25 years if a capture and control system is used to reduce mobile source emissions. Section 101.304(e)(4)(A) establishes that, for these capture and control system projects, as appropriate, the MERC calculation will consider: the mobile source emissions that are not captured; any emissions not controlled by the system; and any emissions caused by or as a result of operating and/or moving the system. Section 101.304(e)(4)(B) is adopted to require that the initial owner of the MERCs is the owner or operator of the capture and control system. The provisions in §101.304(e)(4) are adopted to facilitate program implementation regarding use of capture and control systems for mobile sources as stakeholders have expressed interest in using these types of controls, which have historically been primarily applicable to stationary sources. The subsequent paragraphs are renumbered.

Language changes are adopted in renumbered §101.304(e)(5) to remove the name of the application form (to avoid future rulemaking if the name changes), clarify that the application is to be signed by an authorized account representative, and require that the supporting documentation include records to characterize the source's historical adjusted and SIP emissions estimates.

In renumbered §101.304(e)(6), language changes are adopted to specify that an EBT

certification form will replace agreed orders as the method to document special conditions associated with credited emissions reductions, such as, but not limited to, written certification and photographs when a replaced or shutdown mobile source is made permanently inoperable, for an on-road mobile source, a certified or duplicate Texas Nonrepairable Vehicle Title when a replaced or shutdown mobile source is made permanently inoperable, a bill of sale and bill of lading when a replaced or shutdown mobile source is permanently removed from North America; and a new maximum allowable emissions limit for mobile sources that are not replaced or shutdown. The EBT certification form is adopted to be the mechanism to ensure emissions reductions from mobile sources are permanent and federally enforceable as it will ease program implementation relative to the use of agreed orders for this purpose.

§101.306, Emission Credit Use

In existing §101.306(c)(1) and (2), there are different deadlines for submitting an application to use ERCs and MERCs. The differences arose in the previous rule project because the provisions for MERCs were not changed when the repeal of §101.304 was not adopted. However, there is no reason to have different deadlines for applications for using ERCs and MERCs, so the commission removed the provisions specific only to MERCs and to make the provisions for ERCs apply to both ERCs and MERCS. Similarly, the provisions added in the prior rulemaking on restrictions of the earliest date that a use application can be submitted are needed for MERCs for the same reasons they are needed for ERCs: the applicant must have the emission credit in the portfolio of the site where the offsets are needed for the use application to be processed; and to avoid

circumvention of the provision of emission credits expiring, applicants will not be allowed to submit an application for using emission credits as offsets until an application for the permit or amendment is determined to be administratively complete. Additionally, the requirement to identify the MERCs to be used as offsets before permit issuance is deleted to allow additional time for obtaining the MERCs and to avoid the need to modify the permit if different MERCs are used as offsets than were originally intended. A deadline for submitting a MERC use application before the start of operation, rather than before construction as in existing §101.306(c)(2)(A), is consistent with NNSR requirements for the new or modified facility to obtain offsets before beginning operation. It is also consistent to remove the requirement in existing §101.306(c)(2)(A) for users to identify MERCs prior to permit issuance because this is not a requirement in the commission's NNSR permit program in Chapter 116, Subchapter B. However, any facility using MERCs as NNSR offsets could not start operation until the use of the MERCs as an offset is approved, as is provided for ERCs. The provision in existing §101.306(c)(2)(B) is removed because the provision that users must keep records is also in §101.302. With these adopted changes, §101.306(c)(1) no longer differentiates between ERC and MERC use applications, and existing paragraph (3) is renumbered as paragraph (2).

In §101.306(d), the commission expanded the inter-pollutant use of ERCs to include MERCs by replacing the acronym "ERCs" with the term "emission credits" throughout the subsection. The restriction on inter-pollutant use of emission credits as offsets for NNSR permits, the requirements for modeling to demonstrate that the overall air

quality and the regulatory design value in the nonattainment area of use will not be adversely affected by the substitution (as required under the FCAA), and the requirement that the user receive approval from the executive director and the EPA before inter-pollutant use occurs are retained for both types of emission credits.

Division 4: Discrete Emission Credit Program

*§*101.370, *Definitions*

An amendment to §101.370(4), the definition for "Baseline emissions," is adopted for more consistent use of terminology. The adopted amendment conforms the definition to the program's current practice of assessing credit generation possibilities based on the emissions reduction at a particular facility.

The definition for "Emission reduction" at §101.370(10) is revised for clarity.

The definition of "Generation period" at §101.370(13) is revised to apply to both DERCs and mobile discrete emission reduction credits (MDERCs).

The definitions for "Historical adjusted emissions," "Mobile discrete emission reduction credit," "Mobile source," and "Mobile source baseline emissions" at §101.370(15) - (17) and (19), respectively, are amended to facilitate program implementation by increasing consistency in the procedures used for stationary and mobile sources. The revised definitions make historical adjusted emissions apply to both stationary and mobile sources, MDERCs be expressed in tenths of a ton and be generated from groups of

mobile sources, a mobile source be any source included in the agency's EI under the mobile source category, and mobile source baseline emissions the lowest of the source's historical adjusted emissions or SIP emissions.

A definition of "Point source" is adopted as §101.370(22) to specify that for the purpose of the EBT programs, "point sources" are sources that are not area or mobile.

A definition of "Primarily operated" is adopted as §101.370(23) to specify how to determine when a mobile source is operated often enough in a specific nonattainment area for reductions to be creditable. As discussed elsewhere in the Section by Section Discussion of this preamble related to ERCs, mobile sources are adopted to be considered primarily operated in a specific nonattainment area if at least 75% of their activity occurs in that area. In response to comments, the percentage in which mobile sources are to be considered primarily operated in a specific nonattainment area is changed from at least 85% at proposal to at least 75% for adoption.

A definition for "Projection-base year" is adopted as §101.370(24) to clarify the year in which a point source facility must be in operation in order to potentially qualify to generate an emissions credit. The subsequent definitions are renumbered.

At renumbered §101.370(27), the definition of "Real reduction" is revised to clarify that reductions from the following are not creditable: lowering the permit allowable emission limit without a physical change or change in method of operation; shifting a

vent gas stream, or other pollution or waste stream, to another site; a mobile source that is not capable of being operated as intended; or a change in the emissions factor or emissions calculation equation. The purpose for this adopted change is to ensure that emissions from credited reductions are real and do not return to the air shed from the generating source or by redirecting the source of the emissions to another site.

At renumbered §101.370(31), the definition of "State implementation plan (SIP) emissions" is revised to clarify that the definition applies to facilities at point or area sources and to mobile sources. The adopted changes to this definition are not intended to alter how SIP emissions are determined for point sources. The adopted changes establish that, for area and mobile sources, SIP emissions are actual emissions in the year of the latest TCEQ-generated NEI used to develop modeling included in the applicable SIP revision. Furthermore, the definitions of SIP emissions in §101.300(30) and §101.370(31) were intended to be the same. However, at proposal, certain changes to the definition were inadvertently omitted in §101.370(31) that were included in §101.300(30). To aid in program implementation and for consistency as intended, clarifying changes are made at adoption to the definition of SIP emissions at renumbered §101.370(31)(A) and (B) to make these provisions consistent with the definition of SIP emissions at §101.300(30).

The definition of SIP emissions is revised to specify that, for area and mobile sources, credits will only be generated for actual emissions from each source, as verified by

records provided with the application. Emission credits will not be issued beyond the amount of actual emissions from a source during the latest NEI year used to support modeling in the applicable SIP revision, not to exceed any applicable local, state, or federal requirement, as calculated using the best available data. For example, the latest NEI year used to support SIP modeling for both the DFW and HGB nonattainment areas is 2014. Thus, the SIP emissions for an area or mobile source will be the source's actual emissions from Calendar Year 2014. As such, an area or mobile source must have been operated during 2014 to be eligible for credit generation under the current applicable SIP revision.

For the area, on-road mobile, and non-road mobile source categories, the commission reduced the total amount of SIP emissions eligible for credit generation to mitigate uncertainties associated with the emission estimates, which are generally not based on source-specific data. In practice, the commission will determine the SIP emissions for potential credit generation by reducing the total value in the applicable SIP revision by: 25% for area (excluding residential) and non-road mobile sources (75% of SIP emissions for these categories is available for credit generation); and 15% for the on-road mobile source category (85% of SIP emissions for this category is available for credit generation). After the initial set-aside is accounted for, the commission will make the pool of remaining emissions available for credit generation.

Finally, the definition is revised to establish that the applicable SIP revision for determining the SIP emissions will be set in the order of SIP revisions listed in adopted §101.370(31)(B) and (E). This will facilitate program implementation by setting the applicable SIP revision for area and mobile sources in a manner that is consistent with the treatment of point sources.

§101.372, General Provisions

Amended §101.372(a)(1) and (2), and the deletion of existing §101.372(a)(2) are adopted to facilitate program implementation by increasing consistency in the procedures used for stationary and mobile sources as both types of discrete emission credits (DERCs and MDERCs) are adopted to be eligible for inter-pollutant trading as provided by §101.376.

Amended §101.372(b) is adopted to clearly specify that point, area, and mobile sources are eligible to generate discrete emission credits. Language is adopted as §101.372(c) to specify that the following types of sources cannot generate credits: residential sources; sources that do not have records to support approved or approvable methods to quantify emissions; on-road mobile sources that are not part of an industrial, commercial, nonprofit, institutional, or municipal/government fleet; and mobile sources that do not primarily operate within the nonattainment area. These categories are adopted to be restricted from generating credits as the sources cannot be expected to meet the federal requirements regarding emissions reductions being real, surplus, and quantifiable. An exception is provided to the ineligibility requirement related to primarily operating in a specific nonattainment area to allow flexibility for generating credits from marine and locomotive sources that use capture and control emissions

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

reduction systems. The subsequent subsections are re-lettered.

Under adopted §101.372(c)(2), the types of records expected include documentation of the characteristics taken into consideration to estimate emissions, such as activity level, emission flow rate, pollutant concentration, etc. The approved or approvable methods required will include previously EPA-approved protocols or protocols submitted to EPA for approval under re-lettered §101.372(e).

To ensure creditable emissions reductions are surplus as required, language is revised at re-lettered §101.372(d)(1)(C) and (2)(B) - (D) to specify, respectively, that facilities and mobile sources cannot generate credits unless the reduction occurred during or after the SIP emissions year and the sources were operated in an applicable nonattainment area during the SIP emissions year. In response to comments, the word "individual" was removed in adopted §101.372(d)(1)(C). As discussed elsewhere in this preamble, comments indicated that the word "individual" at §101.302(d)(1)(C) and (f)(1) and §101.372(d)(1)(C) and (g)(1) resulted in a restrictive reading regarding what actions are available to the commission. As noted elsewhere in this preamble, under certain circumstances, the commission treats multiple emission points as a single unit equivalent to a facility and the commission may consider grouped emission points to be a single facility for the purposes of generating an ERC or DERC for an area source.

To ensure creditable emissions reductions are quantifiable as required, language is adopted as $\S101.372(e)(1)(C)$ to specify that, except as specified in $\S101.372(e)(1)(A)$

and (B), the owner or operator of a source subject to Chapter 106 or a permit issued under Chapter 116 must use the required testing and monitoring methodologies that apply to its facilities to show compliance with the applicable requirements. The subsequent subparagraphs are re-lettered.

To assist in facilitating efficient submittal and processing of credit applications, language is adopted at §101.372(f) to specify that beginning January 1, 2018 all credit applications must be electronically submitted through STEERS unless an applicant receives prior approval for an alternative form of application submission. The subsequent subsections are re-lettered.

To facilitate efficient program implementation, language is adopted at re-lettered §101.372(g)(1) to specify that a facility, aggregated fugitive emissions, and aggregated mobile sources (for the pollutant and reduction date) incapable of generating at least 0.1 ton of credit after all adjustments are applied cannot generate discrete emission credits. In response to comments, the word "individual" was removed at adopted §101.372(g)(1). As discussed elsewhere in this preamble, comments indicated that the word "individual" at §101.302(d)(1)(C) and (f)(1) and §101.372(d)(1)(C) and (g)(1) resulted in a restrictive reading regarding what actions are available to the commission. As noted elsewhere in this preamble, under certain circumstances, the commission treats multiple emission points as a single unit equivalent to a facility and the commission may consider grouped emission points to be a single facility for the purposes of generating an ERC or DERC for an area source.

It is also adopted that fugitive emissions or mobile source emissions aggregated to meet the requirement that emission reductions be certified for at least 0.1 ton must be represented on the same application and will have an application deadline date determined by the earliest emission reduction date among the aggregated sources.

At adoption particulate matter with diameters less than or equal to 10 micrometers (PM_{10}) was re-added at renumbered §101.372(h)(6) because it was inadvertently removed at proposal.

\$101.373, Discrete Emission Reduction Credit Generation and Certification
In §101.373(b)(2), language changes are adopted to specify that the emission and activity rates used to calculate historical adjusted emissions must be determined from the same two consecutive calendar years for facilities at both point and area sources.

Language is adopted to require that the "lookback" for area sources be the five years immediately before the emissions reduction is achieved unless detailed operational records are available for more than five years. The lookback period for an area source may be up to ten years immediately before the emissions reduction when detailed operational records are available for those years. If an applicant has ten years of detailed records, then the lookback period could be ten years, but if the applicant only has eight years of detailed records, then the lookback period could only be eight years. This distinction between the lookback for point and area sources is intended to ensure that the air shed realizes actual emissions reductions from the actions used to

generate credits by reducing the circumstances in which credits could be issued for inherent emissions reductions and to address the uncertainties associated with emission estimation for area sources, which are generally not required to have a case-by-case air authorization or perform annual EI reporting.

Language is adopted as §101.373(c)(2) to establish a credit reduction of 15% or 0.1 ton, whichever is greater, for records to support approved alternative methods for quantifying emissions. No reduction will be required when records for quantifying emissions are the same type of records that are required to be maintained by regulation or authorization for a facility operating as a point source or as a component of a point source. The adjustment to the quantity of credits issued based on the quality of the data used to determine the emissions is adopted as a means to account for the uncertainty associated with emissions estimation techniques for area sources. These adopted changes result in the subsequent paragraphs being renumbered. Nonsubstantive clarifying changes regarding the use of the term "facility" and to add a more specific cross-reference were made at adoption to §101.373(c)(2).

In §101.373(d)(1), language changes are adopted to specify that the application must be signed by an authorized account representative. References are updated in §101.373(d)(2). In addition, language is adopted in §101.373(d)(3)(F) to clarify that the requirement to include self-reported EI data for the years used to determine the SIP revision and historical adjusted emissions is only for point sources as area sources are not required to report to the EI.

S101.374, Mobile Discrete Emission Reduction Credit Generation and Certification

Language is adopted in §101.374(a)(1) to clarify that MDERCs are subject to approval
by the executive director and that the number of years that an emissions reduction can
be used for generating MDERCs is limited by the expected remaining useful life of the
mobile source. As described previously in the preamble for MERCs, the expected
remaining useful life is generally determined based on assumptions included in the
applicable SIP revision, such as, but not limited to, parameters used in the on-road
mobile model and in the Texas non-road model to calculate fleet turnover. An
exception to the requirement to consider the expected remaining useful life of the
mobile source is included if a capture and control system is used to reduce mobile
source emissions.

Language is replaced at §101.374(b)(2) and added at §101.374(b)(3) and (4) to specify the timing and location considerations for setting the SIP and historical adjusted emissions for a mobile source. These restrictions are adopted to ensure that emission reductions meet the requirements to be real in terms of the relevant air shed.

The mobile source historical adjusted emissions must be determined from the emission and activity rates during the same two consecutive calendar years. Language is adopted to require that the lookback be the five years immediately before the emissions reduction is achieved unless detailed operational records are available for more than five years. The lookback period for a mobile source may be up to ten years

immediately before the emissions reduction when detailed operational records are available for those years and do not demonstrate decreasing use due to vehicle age or inoperability. If an applicant has eight years of detailed records, then the lookback period would be eight consecutive years. The adopted lookback period requirement for mobile sources is intended to ensure that the air shed realizes actual emissions reductions from the actions used to generate credits by reducing the circumstances in which credits could be issued for inherent emissions reductions (such as diminished use of an older vehicle) and to address the uncertainties associated with emissions estimation for mobile sources, which are not required to have an air authorization or perform annual EI reporting. In addition, it is adopted that a single year of data might be used with executive director approval for vehicles with less than two years use in a nonattainment area. The subsequent paragraph is renumbered.

Language is adopted in §101.374(c)(1) to establish a reduction of 15% or 0.1 ton, whichever is greater, to the amount of credits generated for mobile source shutdown actions. Language is adopted in §101.374(c)(2) to establish a reduction of 15% or 0.1 ton, whichever is greater, for records supporting approved alternative methods for quantifying emissions. Non-substantive clarifying changes to more specifically cross-reference are made at adoption to §101.374(c)(2). Language is adopted in §101.374(c)(3) to establish that the total combined adjustment shall be at least 0.1 ton and no more than 20% if the mobile source is subject to an adjustment based on both the reduction being a shutdown and the quality of the data used to quantify the emissions. The total adjustment is limited to 20% to prevent the adjustment from

becoming a disincentive to participation in credit generation. The adjustment to the quantity of credits issued for the shutdown of a mobile source is adopted as a means to account for the potential overall increase in nonattainment area emissions from the shifting of emissions location. The adjustment to the quantity of credits issued based on the quality of the data used to determine the emissions is adopted as a means to account for the uncertainty associated with emissions estimation techniques for mobile sources.

Language is adopted as §101.374(c)(4) to establish that for capture and control system projects, as appropriate, MDERCs calculation will consider: the mobile source emissions that are not captured; any emissions not controlled by the system; and any emissions caused by or as a result of operating and/or moving the system. In addition, §101.374(c)(4) requires that the initial owner of the MDERCs is the owner or operator of the capture and control system. The provisions in §101.374(c)(4) are adopted to facilitate program implementation regarding use of capture and control systems for mobile sources as stakeholders have expressed interest in using these types of controls, which have historically been primarily applicable to stationary sources.

In §101.374(e)(1), the adopted changes include substituting the generic wording "designated application form" in place of the specific form name and designation (to avoid future rulemaking if the name changes), as well as requiring the application to be signed by an authorized account representative. Adopted language also includes replacing "discrete emission reduction strategy activity has been completed" with "end

of the generation period," replacing "the first" with "each," and removing the last sentence to simplify the requirement to submit an application to generate MDERCs within 90 days after each 12-month generation period and 90 days after the generation period ends, regardless of length. This submission schedule is consistent with the definition of "generation period" in the current and revised rules because each generation period cannot exceed 12 months. A separate application is needed to generate MDERCs from each generation period.

In §101.374(e)(2), the reference is changed due to the referenced subsection being relettered. Language changes are adopted to §101.374(e)(3) to remove the name of the application form (to avoid future rulemaking if the name changes), clarify that the application must be signed by an authorized account representative, and to require that supporting documentation be provided with the credit generation application form.

§101.376, Discrete Emission Credit Use

In existing §101.376(a)(6), the acronym "DERC" is replaced with the term "discrete emission credit" to clarify that neither DERCs or MDERCs can be used before the credits are available in the compliance account of the use site.

The commission removed existing $\S101.376(b)(2)(C)$ for the same reasons as discussed previously in the Section by Section Discussion portion of this preamble regarding the changes to $\S101.306(c)(1)$ and (2). This change has the provisions for DERCs in existing

§101.376(b)(2)(D), which is re-lettered as §101.376(b)(2)(C), apply to both DERCs and MDERCs by removing the phrase "for the use of DERCs" in existing §101.376(b)(2)(D); these provisions will require the user of MDERCs used as offsets to submit an application form specified by the executive director at least 90 days before the start of operation and before continuing operation for any subsequent period for which the offset requirement was not covered under the initial application. The adopted changes align the MDERC and DERC submission requirements; these adopted submission requirements are also consistent with corresponding provisions in the ERC Program.

In §101.376(c)(4), the phrase "DERC or mobile DERC" is changed to "discrete emission credits" for consistency with the phrasing in the rest of the section. In §101.376(d)(1)(B)(ii) and (iii), the commission removed the acronym "DERC" because both DERCs and MDERCs can be used for compliance with the Mass Emissions Cap and Trade Program and as offsets for new source review permits. In §101.376(d)(1)(B)(iii), a citation changed by this rulemaking is also adopted in its revised form. For consistency in subparagraph (B), the term "discrete emission credit" is removed from §101.376(d)(1)(B)(iv). In §101.376(d)(1)(D)(viii) - (x), the phrasing relating to credits that will be acquired is removed because it conflicts with the revised provision in §101.376(a)(6) that credits must be in the compliance account of the site before use occurs.

In the existing equations in §101.376(d)(2)(A)(i) and (ii) and (C), the commission changed the designation of the variable "DERCs" to "DECs" for clarity. The calculations

can be used for either DERCs or MDERCs, so the general term for the credits is more appropriate, and this change will have no effect on the use of the equations.

The reference to "commission" at §101.376(e)(3), is changed to "executive director" to conform with current rule drafting policy.

In §101.376(g), the commission expanded the inter-pollutant use of DERCs (i.e., the substitution of a credit certified for one ozone precursor for the other precursor) to include MDERCs by replacing the acronym "DERCs" with the term "discrete emission credits" throughout the subsection. The restriction on inter-pollutant use of discrete emission credits to offsetting for NNSR permits, the requirements for modeling to demonstrate that the overall air quality and the regulatory design value in the nonattainment area of use will not be adversely affected by the substitution (as required under the FCAA), and the requirement that the user receive approval from the executive director and the EPA before inter-pollutant use occurs are retained for both types of discrete emission credits.

Final Regulatory Impact Determination

The commission reviewed the adopted rulemaking in light of the regulatory impact analysis requirements of Texas Government Code, §2001.0225, and determined that the adopted rulemaking does not meet the definition of a "major environmental rule" as defined in that statute, and in addition, if it did meet the definition, would not be subject to the requirement to prepare a regulatory impact analysis. A "major

environmental rule" means a rule, the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure, and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The adopted rules amend a voluntary program to generate ERCs to improve the flexibility and functionality of these rules, and do not impose requirements that regulated entities must participate in the program. Additionally, the adopted rulemaking does not meet any of the four applicability criteria for requiring a regulatory impact analysis for a major environmental rule, which are listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225, applies only to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

The EBT rules in Chapter 101, Subchapter H define several market-based programs that provide sites with additional flexibility for complying with air regulations, such as the offset requirements in NNSR permits or the unit-specific emission limits in various state rules. These programs include the ERC Program rules in Division 1 that allow sources in nonattainment areas to generate, bank, trade, and use credits from

permanent reductions in emissions and the DERC Program rules in Division 4 to allow sources statewide to generate, bank, trade, and use credits from reductions in emissions below regulatory requirements. Because these programs are market-based, the costs associated with trades of credits and allowances are not controlled. In recent years, the cost of credits has risen substantially. In response, there has been significant interest in the regulated community for alternatives that facilitate generation and for flexibility in use. This increased interest has uncovered several implementation issues in the existing EBT rules. This rulemaking revises the EBT rules in Chapter 101 to respond to these issues and improve the workability and functionality of the rules.

The adopted rulemaking implements requirements of 42 United States Code (USC), §7410, which requires states to adopt a SIP that provides for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standard (NAAQS) in each air quality control region of the state. While 42 USC, §7410 generally does not require specific programs, methods, or reductions in order to meet the standard, the SIP must include enforceable emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter (42 USC, Chapter 85, Air Pollution Prevention and Control). The provisions of the FCAA recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public, to collaborate on the best methods for attaining the

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

NAAQS for the specific regions in the state. Even though the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. States are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that their contributions to nonattainment areas are reduced so that these areas can be brought into attainment on schedule. The adopted rulemaking will revise the EBT rules in Chapter 101 to respond to issues with flexibility and use of the rules, and to improve the workability and functionality of the rules.

The requirement to provide a fiscal analysis of adopted regulations in the Texas Government Code was amended by Senate Bill (SB) 633 during the 75th Legislature, 1997. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis of extraordinary rules. These are identified in the statutory language as major environmental rules that will have a material adverse impact and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 concluding that "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted adopted rules from the full analysis unless the rule was a major environmental rule

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

that exceeds a federal law.

As discussed earlier in this preamble, the FCAA does not always require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each area contributing to nonattainment to help ensure that those areas will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, and to meet the requirements of 42 USC, §7410, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule adopted for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full regulatory impact analysis contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Since the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full regulatory impact analysis for rules that are extraordinary in nature. While the SIP rules will have a broad impact, the impact is no greater than is necessary or appropriate to meet the requirements of the FCAA. For these reasons, rules adopted for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required by federal law.

The commission has consistently applied this construction to its rules since this

statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp,* 919 S.W.2d 485, 489 (Tex. App. Austin 1995), writ denied with per curiam opinion respecting another issue, 960 S.W.2d 617 (Tex. 1997); Bullock v. Marathon Oil Co., 798 S.W.2d 353, 357 (Tex. App. Austin 1990, no writ). *Cf. Humble Oil & Refining Co. v. Calvert,* 414 S.W.2d 172 (Tex. 1967); Dudney v. State Farm Mut. Auto Ins. Co., 9 S.W.3d 884, 893 (Tex. App. Austin 2000); Southwestern Life Ins. Co. v. Montemayor, 24 S.W.3d 581 (Tex. App. Austin 2000, pet. denied); and Coastal Indust. Water Auth. v. Trinity Portland Cement Div., 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the regulatory impact analysis requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." The legislature specifically identified Texas Government Code, §2001.0225, as falling under this standard. The commission has substantially complied with the requirements of Texas Government Code, §2001.0225.

The specific intent of the adopted rulemaking is to revise the EBT rules in Chapter 101

to respond to issues with flexibility and use of the rules and to improve the workability and functionality of the rules. The adopted rulemaking does not exceed a standard set by federal law or exceed an express requirement of state law. No contract or delegation agreement covers the topic that is the subject of this adopted rulemaking. Therefore, this adopted rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because the adopted rulemaking does not meet the definition of a "major environmental rule," and also does not meet any of the four applicability criteria for a major environmental rule.

The commission invited public comment regarding the Draft Regulatory Impact Analysis Determination during the public comment period. No comments were received on the Draft Regulatory Impact Analysis Determination.

Takings Impact Assessment

The commission completed a takings impact assessment for this rulemaking action under Texas Government Code, §2007.043. The primary purpose of the rulemaking is to revise the EBT rules in Chapter 101 to respond to issues with flexibility and use of the rules, and to improve the workability and functionality of the rules. Promulgation and enforcement of the amendments will not burden private real property. The rules do not affect private property in a manner that restricts or limits an owner's right to the property that would otherwise exist in the absence of a governmental action. Additionally, the ERCs and DERCs that would be affected by these rules are not property rights (*see* adopted §101.302(k) and §101.372(l)). Because these credits are

not property, rules that revise how these credits are generated and used does not constitute a taking. Consequently, this rulemaking action does not meet the definition of a takings under Texas Government Code, §2007.002(5).

Consistency with the Coastal Management Program

The commission reviewed the adopted rulemaking and found the adoption is a rulemaking identified in the Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(2), relating to rules subject to the Coastal Management Program, and will, therefore, require that goals and policies of the Texas Coastal Management Program (CMP) be considered during the rulemaking process. The commission reviewed this adopted rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Advisory Committee and determined that the adopted amendments are consistent with CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(1)). No new sources of air contaminants will be authorized and the revisions will maintain the same level of emissions control as previous rules. The CMP policy applicable to this rulemaking action is the policy that the commission's rules comply with federal regulations in 40 Code of Federal Regulations (CFR), to protect and enhance air quality in the coastal areas (31 TAC §501.14(q)). This rulemaking action complies with 40 CFR Part 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans. Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

policies.

The commission invited public comment regarding the consistency with the CMP during the public comment period. No comments were received regarding the consistency with the CMP.

Effect on Sites Subject to the Federal Operating Permits Program

The requirements of 42 USC, §7410 are applicable requirements of 30 TAC Chapter 122. Facilities that are subject to the Federal Operating Permits Program will be required to obtain, revise, reopen, and renew their federal operating permits as appropriate in order to include the adopted rules.

Public Comment

The commission offered public hearings in Houston on April 18, 2017; in Arlington on April 19, 2017; and in Austin on April 20, 2017, and received no oral comments. The comment period closed on April 24, 2017. The commission received comments from the Environmental Defense Fund (EDF); Lloyd Gosselink Attorneys at Law (Gosselink) on behalf of the Solid Waste Association of North America, City of Houston, City of San Antonio, City of Denton, City of Irving, Freedom CNG, and NOVUS Wood Group LP; Green Environmental Consulting, Inc. (GEC); Houston-Galveston Area Council (H-GAC) on behalf of H-GAC, EDF, ExxonMobil, Advance Environmental Group, Railserve, Rightship, Caterpillar Inc., EMD Power Products, Element Markets, and Port of Houston Authority; Texas Pipeline Association (TPA); and the Trades, which include the Texas

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

Association of Business, Texas Association of Manufacturers, Texas Chemical Council, Texas Industry Project, Texas Oil and Gas Association, and TPA. General support for the rule revision was received from all commenters although specific changes to the rules were suggested in 14 comments.

Response to Comments

General comments

Comment

EDF commented that it is particularly concerning that historically, the majority of users of VOC ERCs have also had significant amounts of unauthorized emissions, not only for criteria air pollutants, but also for hazardous air pollutants. Thus, the TCEQ should not allow facilities with a demonstrated history of unauthorized emission events to participate in these programs.

Response

The primary purpose of this rulemaking is to facilitate credit generation by area and mobile sources. Changes to the requirements for participation in the program, other than those directly related to characteristics of a participant as an area or mobile source, are beyond the scope of this rulemaking. The release of unauthorized emissions is addressed through the agency's enforcement process, not the EBT program. No change to the rules was made in response to this comment.

Comment

Gosselink commented that under the existing EBT rules, MERCs have a limited life of five years between the date they are generated and the date they are used. This limited life should be extended to at least ten years, if not eliminated altogether. There is no basis for this restriction, and the restriction is detrimental to the MERCs (and more broadly to the ERCs) program, particularly in light of the amount of time it often takes to get the MERC (or ERC) certified.

Response

The established five-year lifespan for ERCs and MERCs was set prior to this rulemaking based on criteria outlined in the federal economic incentive program guidance (EPA-452/R-01-001) and federal statute of limitations. This rulemaking aligns MERC application due dates and historical adjusted emission periods with those for ERCs and establishes limited situations in which the lifespan of an ERC or MERC may be as long as six years. Historically, ERCs have been used primarily for offsetting in NNSR permits, and it is anticipated that the same will be true for MERCs. To meet NNSR program criteria, credits used as offsets should be from recent emission reductions. To facilitate program implementation, it is important to keep the MERC and ERC lifespans the same to avoid any constraints on their use for offsets. No change to the rules was made in response to this comment.

Comment

GEC commented that this proposed rulemaking does not allow the generation of ERCs

and DERCs from a facility, fugitive emissions from aggregated facilities, or aggregated mobile sources that cannot generate at least 0.1 ton per year of credit after all adjustments are applied. GEC agreed that the 0.1 ton per year increment is appropriate and considered it important that the increment not be limited further. Many small facilities may generate small amounts of ERCs and/or DERCs in the future, and these need to remain viable credits for sale to other small facilities. It is often difficult to purchase small incremental credits from larger banked amounts.

GEC commented that the proposed rulemaking does not appear to address the quantity or increment of ERCs and DERCs that may be sold or transferred, and requested that, either by future rulemaking or guidance, the TCEQ not limit the quantities or increments of ERCs and/or DERCs that may be sold or transferred. This is important for small facilities that may need to purchase small amounts of ERCs.

Response

The commission agrees that the 0.1 ton per year increment is the appropriate minimum unit for credit generation. Since two-step conventional rounding is used for ERC generation, a facility can reduce emissions by 0.045 or greater ton per year and the potential ERC generated would be rounded to 0.1 ton per year. For consistency purposes, processing, and tracking, the commission requires all credit transactions to be in 0.1 ton per year increments. This rulemaking does not change the minimum increment of credits allowed for transfer. No changes have been made to the rules or are currently planned to further limit the increment in which

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

credits can be generated, transferred, or used.

Comment

TPA commented that they support the TCEQ's proposal for a longer look-back period of up to 10 years for establishing baseline emissions.

Response

The commission appreciates the support for this aspect of the rulemaking.

Comment

The Trades commented that the TCEQ should use a rule amendment process, rather than the proposed petition process, for changes to the inelastic source list. A rule change, rather than a change on an executive director list, is legally preferable for determining ineligibility to generate area and mobile credits.

Response

The commission disagrees that a rule amendment process is necessary or legally preferable for determining ineligibility to generate area and mobile credits. As discussed in the Section by Section Discussion portion of this preamble, like the rulemaking process, the proposed petition process includes public notification, the opportunity for public comment, and formal commission action. Parties who wish to be assured of notification regarding potential changes to the inelastic source list should register for notifications at

https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new. "Gov delivery" notifications will be sent to those registered for the Emissions Banking and Trading listserv whenever any changes to the inelastic source list are available for public review. No change to the rules was made in response to this comment.

Comment

The Trades commented that the TCEQ should clarify the type of documentation necessary to satisfy the burden of proof requirements. The Trades are concerned that the documentation process will operate as another mechanism by which the TCEQ can deny ERC generation, even if documentation can be demonstrated for the overall area source, and commented that the TCEQ should take steps to ensure efficient and consistent interpretation from program staff, as well as to better prepare area source applicants as to agency expectations regarding appropriate documentation. The Trades commented that the TCEQ should also recognize that it is unreasonable to require the level of sophistication in recordkeeping of area sources that is required of point sources and should taper its expectations accordingly.

Response

The commission appreciates the concerns raised regarding the documentation that will be necessary to sufficiently document baseline and strategic emissions, and thus quantify emission reductions for credit. At the stakeholder meetings held in December 2016, agency staff presented examples of the types of records that would typically be used to support emissions quantification for different types of

facilities and mobile sources. The agency anticipates providing further guidance on this topic shortly after this rulemaking becomes effective. This guidance is expected to help credit generation applicants prepare complete applications and ensure efficient and consistent application review by program staff. The records used to support emissions quantification are intended to be the minimum necessary to document that the emission reduction is, in fact, surplus, real, quantifiable, permanent, and enforceable, as federally required for all types of sources. No change to the rules was made in response to this comment.

Comment

H-GAC requested that the TCEQ address how the proposed rulemaking outlines the following critical elements of a successful program: creditable, air quality, and economic growth and jobs.

Response

The EBT program rules in Chapter 101, Subchapter H include market-based programs that provide flexibility for complying with air regulations, such as the offset requirements in NNSR permits or the unit-specific emission limits in various state rules. This rulemaking addresses the two voluntary emission credit programs designed to incentivize emissions reductions beyond regulatory requirements. The purpose of this rulemaking is to facilitate credit generation and allow for flexibility in credit use by area and mobile sources. By providing increased flexibility, this rulemaking can be expected to indirectly support economic growth and job creation

in those areas of the state where NNSR offset requirements apply. The rules are structured to meet the federal requirements that emission reductions be surplus, real, quantifiable, permanent, and enforceable, and thus may result in air quality benefits. Additionally, the emissions offset ratio, as determined by an area's nonattainment classification, is greater than one-for-one. These additional offsets for NNSR permits may result in further air quality benefits. No change to the rules was made in response to this comment.

Health Concerns

Comment

EDF commented that the use of significant numbers of ERCs or DERCs by industrial facilities in environmental justice communities could further exacerbate the disproportionate health impact on the residents of these communities. EDF commented that to better address environmental justice considerations in the proposed rulemaking, the TCEQ should prioritize projects with significant potential for reduction of health pollutants, in addition to reduction of ozone precursors. As an example, EDF stated that particulate matter 2.5 microns or less in diameter ($PM_{2.5}$) has been linked to numerous adverse health outcomes and also happens to be an emission from internal combustion of diesel (and other petroleum based fuels) engines. EDF stated that projects demonstrating significant emission reductions from $PM_{2.5}$, in addition to NO_x , could improve air quality for neighboring communities, while also providing an ERC opportunity for businesses.

EDF commented that the TCEQ could reduce the risk for pollution hotspots by incorporating into the EBT program a requirement for co-locating where credits are generated with where they are used. EDF stated a number of studies have reported that pollution hotspots can be created if EBT programs are not developed carefully and that requiring co-location of credit generation and use along the Houston Ship Channel would be one way to mitigate the potential for hotspots.

EDF commented that the TCEQ should use and publicize the results of an environmental justice screen or similar assessment of projects to evaluate community impacts and benefits, for any purchase of ERCs greater than 10 tons. EDF stated that the EBT program is currently designed only with business flexibility in mind, but businesses in the HGB region operate in close proximity to neighborhoods and their operations can affect the lives of people on a daily basis. EDF further stated that the TCEQ's mission to "protect {the} state's public health and natural resources consistent with sustainable economic development" does require the agency to consider public health implications for rules, and to date, the agency has not provided indication that these critically important elements have been considered.

Response

These comments are outside the scope of this rulemaking. The primary purpose of this rulemaking is to facilitate credit generation by area and mobile sources in a manner that is consistent with federal requirements. However, the commission notes that use of emission credits in the NNSR program involves an "environmental"

contribution" included as part of the more than one-to-one offset ratio for nonattainment areas. By generating credits from controls and shutdowns and then using the credits in NNSR permits to exceed the amount of emissions that are permitted, fewer total emissions enter the airshed. No change to the rules was made in response to these comments.

Comment

EDF commented that the TCEQ should also remove the allowance of inter-basin trading in the program unless a comprehensive demonstration of no adverse impact can be conducted.

Response

This comment is outside the scope of this rulemaking. For inter-basin trading, the current rules are written to require executive director and EPA approval and demonstrations that show the county of use is not negatively impacted. No change to the rules was made in response to this comment.

SIP/EI

Comment

The Trades commented that a protocol that is sufficient for submission of EI data should be considered to be an appropriate demonstration for these EBT rules. The Trades further stated concern over the rule's requirement that applicants use applicable emissions quantification protocols in Chapters 106, 115, 116, and 117 for

credit generation emissions estimation. Given the TCEQ's significant concerns about SIP integrity, the Trades recommended the TCEQ add a provision stating that applicants can follow the protocols identified in the TCEQ's EI guidance for purposes of generating emissions credits under this program.

Response

The EBT rules reference the protocols in the TCEQ rules that implement control strategies for Texas nonattainment areas (e.g., 30 TAC Chapters 115 and 117) because these are considered the most accurate protocols for the types of facilities regulated by those chapters. This aspect of the EBT rules is not revised by this rulemaking and has been approved by the EPA and incorporated into Texas' SIP. The current TCEQ EI guidance reflects the Chapter 115 and 117 protocols as closely as possible for the types of facilities regulated by these chapters.

This rulemaking adds the requirement that facilities subject to a requirement under Chapter 106 or a permit issued under Chapter 116 use the testing and monitoring methodologies in those requirements to demonstrate compliance. This rulemaking is intended to facilitate credit generation by area sources and the addition of the requirement to use methodologies from applicable requirements in Chapters 106 and 116 is intended to provide direction to area sources who are subject to such requirements. Area sources are generally not subject to EI reporting requirements, and thus would not be expected to be familiar with EI protocols.

The EBT rules allow that applicants use the most conservative method for replacing missing data when the data supporting the protocols in Chapters 106, 115, 116, and 117 are unavailable. In essence, this results in the rules already allowing the use of EI protocols in certain circumstances.

When EI guidance has changed after a report was filed, the change is to increase the accuracy of subsequent reports; because credits must be based on accurate calculations of real reductions, the revised protocol is used in the calculations for credits, with an upper limit of the reported value to ensure that the SIP attainment demonstration is not adversely affected. In some cases, applicants request to use calculation methods that are different from those used for the EI reports, and these protocols may be allowed, with an upper limit of the EI reported value to ensure that the SIP attainment demonstration is not adversely affected.

No change to the rules was made in response to this comment.

Comment

EDF and H-GAC expressed serious concerns that the HGB SIP has significantly underestimated the large amount of marine and locomotive emissions in and around the Houston Ship Channel. In addition to the air quality implications, this may also have a negative impact on the economic viability of the EBT program, as market-based programs rely on accurate information to be able to provide real environmental (and economic) benefits. EDF also commented that a recent engine survey by Caterpillar and

a review of the 2014 commercial marine vessel inventory (commissioned by TCEQ and completed by a third party consultant) for ocean-going vessels hoteling assumptions clearly demonstrates the need to update the SIP inventory. Moreover, the incorrect assumptions in the SIP appear to be causing a substantial underrepresentation of the emission reduction opportunity (and economic incentive for locomotive and tug owners) associated with upgrade to Tier 4 engines. The commenters concluded that the TCEQ should work with the EPA and stakeholders to ensure that EIs used in the SIP are accurately representing local emissions, and that tug and locomotive owners are given credit for all emission reductions.

Response

These comments are outside the scope of this rulemaking. The TCEQ develops its EIs in accordance with EPA reporting requirements and works closely with the EPA to ensure the inventory is accurate, updated, and comprehensive. Data that may be useful to improve future EIs for use in future SIP revisions may be submitted to the agency's Emissions Assessment Section. No change to the rules was made in response to these comments.

Comment

The Trades expressed concern that the SIP modeling process appears to be driving the offset NNSR banking rules so that, instead of having a rule that serves an administrative function to benefit all sides in identifying appropriate offsets for use in NNSR permitting, the rule has evolved into one that functions to disallow reductions

otherwise allowed in other states under federal law. The Trades commented that this places Texas industry at a competitive disadvantage and results in projects which would have come to Texas being built elsewhere because needed offsets are unavailable. In Attachment A of the comment submitted by the Trades on April 17, 2017, the Trades provided example scenarios under which they believed the rule would allow credit generation and scenarios where they interpreted that the rule as proposed would be expected to prohibit credit generation. The Trades indicated that the scenarios in Attachment A provide examples of the proposed rule's practical effect on area source credit generation. The majority of the scenarios described in Attachment A relate to the replacement of equipment between the SIP emissions year and the time of the potentially credit generating emission reduction.

Response

SIP modeling is an integral part of determining whether emissions reductions are surplus for purposes of meeting federal economic incentive program requirements and is an EPA approved requirement of the Texas program. Reported point source and estimated mobile and area source emissions are the primary inputs for the SIP modeling used to demonstrate anticipated NAAQS attainment by federal deadlines. Credits must be based on emissions that were included in the most recent SIP modeling; otherwise, the attainment demonstration would be compromised by increasing actual emissions beyond those that were used in the attainment demonstration modeling. This rulemaking is intended to increase the amount of credits available by implementing changes to the EBT programs for generating

credits from area and mobile sources.

Several of the scenarios in Attachment A of the Trades' April 17, 2017 comment letter describe situations where the emissions reductions were not expected to generate credits because equipment was replaced between the SIP emissions year and the time of the emissions reduction. The Trades interpret the proposed rule as disallowing the generation of credits in these scenarios because the replacement equipment was not present in the SIP year. The TCEQ disagrees with this interpretation. When an "in-kind" equipment replacement occurs, it is common practice for TCEQ to ensure the replacement equipment is the same as or functionally equivalent to the equipment that was operational in the SIP emissions year and that no shifting of emissions has occurred as a result of the change. If it can be demonstrated that the replacement equipment is the same as or functionally equivalent to the equipment that was operational in the SIP emissions year and that no shifting of emissions has occurred due to the equipment replacement, credits may be issued based on the original equipment and the replacement equipment being considered the same facility.

No change to the rules was made in response to these comments.

Comment

The Trades commented that the TCEQ should clarify and be explicit in the rules that the percentage reduction in §101.303(c)(3) and §101.304(c)(2) may be adjusted

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

downward with improved data. In addition, the Trades commented that the TCEQ should clarify and be explicit in the rules that that the percentage reduction for the overall airshed discount may be adjusted downward with future SIP cycles as data about such sources becomes more reliable.

Response

In the future, the commission may choose to change the overall creditable emissions available and/or the discounts applied to individual credit applications. If this happens, rulemaking will be necessary, with public notice and an opportunity for public comment. For this rulemaking, the commission determined the SIP emissions available for potential credit generation by reducing the total emissions value in the applicable SIP revision by: 25% for area (excluding residential) and nonroad mobile sources; and 15% for the on-road mobile source category. The commission also established the 15% discount for records to support approved alternative methods to quantify emissions (minimum 0.1 ton per year reduction). The commission may decide to reduce the discount amounts as uncertainties decline; however, the commission has determined that it is unnecessary for this to be explicitly stated in the rule itself. The commission always has the ability to adjust TCEQ regulatory requirements in response to improved information within the limitations of federal rules and statutes. No change to the rules was made in response to this comment.

Comment

The Trades commented that there are several state-only provisions within the rules that they believe are likely areas for future rule changes for which federal approval could add a significant time delay. These portions of the rules are not necessary for SIP approval and therefore should remain out of the SIP so that, if future circumstances warrant changes, SIP approval is not a bottleneck to effectuating change. The Trades proposed the following provisions be excluded from the SIP: $\S\S101.303(a)(2)(D)$ and (c)(2) - (4); 101.304(a)(2)(D), (c)(1) - (3), and (e)(3) - (4); 101.372(c); 101.373(c)(2); and 101.374(c)(1) - (3).

Response

The commission disagrees that several provisions within the rule are not necessary for SIP approval and should remain out of the SIP. In order for credits to be used for programs included in the SIP (e.g., offsets for permitting purposes in nonattainment areas or compliance flexibility under other SIP rules), the credits must be federally enforceable and be generated through a SIP-approved program which contains requirements adequate to ensure that SIP approvability criteria are met. While meeting these requirements, the established limitations ensure that allowing credit generation from sources that are estimates and not actual counts still provide flexibility to credit generators. The commission has determined that it is appropriate to submit these provisions to EPA as changes to the SIP so that area and mobile credits may be used as offsets for major NNSR permits. It is necessary to have requirements that provide the kind of limitations that ensure ERCs are real, quantifiable, permanent, enforceable, and surplus. The listed provisions make up

only part of the whole of the program, but nonetheless provide important boundaries that help to ensure the integrity of the EBT program and the Texas SIP. Furthermore, the commenter has failed to provide specific reasons why these provisions are not necessary for SIP approval. No change to the rules was made in response to this comment.

Permanent and Enforceable

Comment

The Trades commented that the TCEQ should clarify the types of monitoring, testing, or other requirements that the agency intends to set as a condition to ERC generation and rely on pre-existing certification forms, such as the APD-CERT and PI-7-CERT, instead of creating Form EBT-CERT. The Trades also commented that TCEQ has proposed compliance requirements to "ensure that emissions reductions associated with credits are real {and} enforceable." And that the proposed rule language in \$101.302(g)(2) states: "As a condition for the certification of a credit, the executive director may specify monitoring, testing, recordkeeping, or other requirements through an Emissions Banking and Trading Certification of Emission Reductions Form (Form EBT-CERT), or other forms considered equivalent by the executive director." The Trades commented that it is unclear whether this provision allows the executive director to specify substantive conditions, or require specific actions, after the ERC is generated. The Trades expressed concern that, as written, the proposed language appears to be a broadening of the agency's existing authority with the potential to create a significant compliance burden on ERC generation. The Trades requested that

this language be removed from the final rule.

Response

The commission appreciates the concern regarding uncertainty as to the types of monitoring, testing, or other compliance requirements that may be put in place as conditions of credit generation to ensure the credited emission reductions are real and enforceable. The commission anticipates primarily relying on standard text already in use for special conditions included in NNSR permits. The Form EBT-CERT is necessary to document these conditions in circumstances when special conditions are not included on the APD-CERT or PI-7-CERT.

In order for an action to generate an ERC, the emission reduction must be permanent. For ERCs generated by point sources, the requirement to permanently reduce emissions can be documented in a special condition in the applicable NNSR permit (i.e., meeting operational specifications of a control device or not re-starting a facility that was shut down to generate credits). Since few area and no mobile sources are authorized via source-specific NNSR permits, the requirements for area and mobile sources to permanently maintain the credited emissions reductions will be documented in an EBT-CERT or other forms considered equivalent by the executive director. The commission does not anticipate that the burden for demonstrating on-going compliance will be any different because the requirement is documented in an EBT-CERT instead of an NNSR permit.

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

No change to the rules was made in response to these comments.

Definitions

Comment

The Trades commented that the proposed definition of "Point source" in §101.300(21) is inconsistent with common usage. The commenter urged the TCEQ not to compound the problems already inherent in these rules by previous wholesale substitution of phrases ("stationary source" to "source" to "facility") and instead omit the definition and revisit the offset program requirements at a future date to discuss rule simplification and clarification of appropriate terminology.

Response

The commission understands that there may be some confusion that is created with the use of common terms that have multiple meanings in the context of air quality laws, rules, authorizations, SIPs, and conversational interactions. However, the commission disagrees that this definition should be omitted. The definition of "Point source" is consistent with, although not identical to, the EPA's definition of point source in the Air Emissions Reporting Requirements, 40 CFR Part 51, Subpart A. Specifically, 40 CFR §51.50 defines a point source as a "large, stationary (non-mobile), identifiable sources of emissions that release pollutants into the atmosphere." Prior to this rulemaking, the EBT rules already had a definition of "area source" that was different, but not inconsistent with the common use of the term in air quality applications. To meet the primary objective of this rulemaking,

facilitating credit generation by area and mobile sources, the commission considers it useful to clearly distinguish what will constitute a point, area, and mobile source for purposes of credit generation. Since an emission reduction must be surplus to the SIP to be creditable, the commission chose to make the point, area, and mobile distinction with a clear link to the EIs that are used as the basis for SIP modeling. The commission has not applied these definitions beyond the EBT rules in Chapter 101, Subchapter H. The offset program requirements are beyond the scope of this rulemaking. No change to the rules was made in response to this comment.

Comment

The Trades commented that the proposed definition of "Primarily operated" in §101.300(22) should allow for more flexibility. The Trades commented that the TCEQ should amend §101.300(22) to allow for discretion by the executive director in setting the percentage as follows: "When activity is at least 75% within a specific nonattainment area, or as approved by the executive director."

Response

The commission generally agrees with the commenter and has changed the definition for primarily operated to "at least 75% within a specific nonattainment area." This change would align the requirement with other TCEQ programs, such as the Texas Emissions Reduction Program (TERP). However, to facilitate program implementation and avoid the potential resource drain associated with case-by-case considerations, the commission did not revise the definition to allow case-by-case

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

executive director approval of other activity demonstrations.

Comment

The Trades commented that the definition of "State implementation plan (SIP) emissions" in §101.300(30) is too complex and needs clarity to ensure area and mobile source ERC viability. The Trades commented that the TCEQ should clarify that its choice to use a new SIP EI year would not devalue previously issued emissions credits.

Response

The commission appreciates the concern that the definition of SIP emissions is complex and has attempted to fully explain how this definition is intended to be interpreted in this rulemaking preamble. A new SIP EI year alone would not devalue previously issued credits as long as the EBT bank is modeled while demonstrating attainment and there are no new applicable rules. In the past, the agency has undertaken efforts to notify interested parties of a SIP EI year change so that generators have an opportunity to generate credits before a new SIP EI year change occurs and has included banked credits in SIP modeling to avoid the credits being potentially devalued. No change to the rules was made in response to this comment.

Area Sources

Comment

TPA commented that they support the TCEQ's decision not to discount credits

generated by an area source when the area source has records for quantifying emissions that are the same type of records that are required to be maintained by a point source.

Response

The commission appreciates the support for this aspect of the rulemaking.

Comment

TPA and the Trades commented that a FIN-by-FIN approach is contra to the concept of an area source emission credit program and unnecessarily hampers area source credit generation. The Trades commented that a unit-level structure would negate the opportunity for many area sources to generate credits. The Trades stated that area sources, by definition, have small emissions and those emissions are not reported as individual equipment emissions into the inventory. In addition, the Trades stated that stringent application of FIN-by-FIN recordkeeping requirements could result in many real reductions being determined as ineligible for ERC generation. Rather than restricting area source generation to facility-level increments, the Trades recommended the TCEQ allow area sources to meet the 0.1 ton per year threshold requirement at the area source level and not require area source owners to "prove up" which individual pieces of equipment were operating in the baseline SIP year used for the EI. TPA also commented that modifying the current FIN-by-FIN approach to allow for aggregation of reductions across the area source is of vital importance in ensuring that any area source credits program that is finalized is workable and beneficial in

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

real-world practice.

The Trades commented that in addition to the FIN-by-FIN approach not being legally required, it is not an efficient use of resources to add the same onerous and time-consuming requirements on the area source application process. The Trades also commented that the "reasoned justification" given by the TCEQ for developing a FIN-by-FIN baseline SIP year comparison for point sources (which was the practical result of the two changes made in the 2000 and 2001 rulemaking), does not apply to area sources. The Trades stated that the area source SIP model does not utilize equipment-specific EI information and that area source inventories are based on higher level data (generally county-level estimates from the Texas Air Emissions Repository), utilizing an emission factor (emissions per unit of activity).

Response

The commission disagrees that a FIN-by-FIN approach is contra to the concept of an area source emission credit program and unnecessarily hampers area source credit generation. The EPA's economic incentive program guidance (EPA-452/R-01-001) for open market trading programs requires emissions reductions to be quantifiable, in addition to real, surplus, permanent, and enforceable. This EPA guidance specifically states, "The generation or use of emission reductions by a source or group of sources is quantifiable if they can reliably calculate the amount of emissions and/or emission reductions occurring during implementation of the program, and replicate the calculations." The area source EI is developed for

specific source categories that are defined by the EPA. In practice, these EPA source categories can represent either activities (e.g., automobile painting, commercial fuel combustion) or specific types of sources (e.g., natural gas dehydrators, compressor engines greater than 50 but less than 500 horsepower, landfills) at the county-level. Although the data represented in the SIP is an estimate, the requirement that sources seeking to generate credits must demonstrate emission reductions are real and quantifiable still applies. Such a demonstration requires information about emissions from facilities at a source, i.e., a FIN-by-FIN approach.

The commissions disagrees that the FIN-by-FIN approach is not an efficient use of resources. Emission reductions are calculated on a FIN-by-FIN approach in point source applications because this approach ensures that reduced emissions were calculated accurately. This need also exists for area source applications. Even where aggregating emissions is allowed (i.e., fugitive emissions and increased efficiency of a control device for multiple facilities), the calculation for each facility's contribution still must be done accurately. Under certain circumstances, the commission treats multiple emission points as a single unit equivalent to a facility. For the purposes of generating an ERC or DERC for an area source, the commission may consider grouped emission points to be a single facility, and may certify credits from the grouped emission points so long as the total grouping has emissions equal to or greater than 0.1 ton or tpy, even if points within the group have emissions of less than 0.1 ton or tpy. Credit generation cannot exceed the group's actual emissions in the SIP emissions year or the historical adjusted

emissions years and such a group may include equipment that was not operational during the SIP emissions year or the historical adjusted emissions years.

The emissions estimation methods small sources are likely to use (testing, emissions factors, and mass balance) all have some inherent uncertainty. The accuracy of testing data depends on the type of analysis performed and the techniques used. Manufacturer's emissions factor data is generally from the specification of the upper limit of emissions that a facility would be expected to emit as manufactured. Mass balance data is based on changes in weight during a process or operation and generally assumes that all weight lost was from emitting the pollutant, which may not be correct. The commission has determined that the requirements in this rulemaking balance the uncertainty associated with these emission estimation methods and the need to ensure credited emission reductions are "real." In addition, the commission's experience with prior credit generation applications from area sources indicates that this will result in an area source credit program that is expected to be workable and beneficial in real-world practice.

In response to the comments, the word "individual" was removed in adopted §101.302(d)(1)(C) and (f)(1) and §101.372(d)(1)(C) and (g)(1) to clarify that under certain circumstances, the commission treats multiple emission points as a single unit equivalent to a facility and the commission may consider grouped emission points to be a single facility for the purposes of generating an ERC or DERC for an area source.

Comment

The Trades commented that the TCEQ is already proposing to cap the area source inventory and to apply multiple discounts which reduce the amount of area source emissions credits that can be generated in order to address uncertainties about the accuracy of the EI used in the SIP baseline year modeling. The Trades commented that there is no need to require area sources to also produce records and "prove-up" every discrete piece of equipment at the area source during a SIP baseline year in order to generate credits and that facility-level data is not in the SIP baseline inventory and was not relied upon by the TCEQ in its modeling efforts.

Response

This rulemaking will impose a limit on the amount of creditable area source SIP emissions and apply discounts to area source credit applications for shutdowns or in the very rare circumstance in which a new data quantification method must be sent to EPA for approval. These discounts are necessary to address uncertainties regarding area source SIP emissions, emissions shifting, and new emissions quantification procedures. These safeguards are unrelated to the requirement to quantify emissions on a FIN-by-FIN basis and provide FIN-specific records. The requirement for equipment records is intended to ensure that each specific potentially creditable emission reduction is real and quantifiable, consistent with the federal economic incentive program guidelines. No change to the rules was made in response to these comments.

Comment

The Trades commented that conflicting usage of the term area source and facility leads to confusion and recommends the definition of "Area source" (and "Mobile source") to reflect that the term can cover one or more facilities at area sources (or sources in the case of mobile sources).

Response

The commission understands that reviewers found that the usage of the terms "Area source" and "Facility" in the proposal confusing. Nonsubstantive clarifying changes have been made to the rule language in some cases to add additional consistency and clarity. However, the commission does not agree that the definition of "Area source" should be changed to reflect that the term can cover one or more facilities at an area source. This definition existed prior to the rulemaking and this rulemaking is not intending to change how this definition is applied. The term "Mobile source" is intended to reflect an individual vehicle or piece of equipment, such as an individual bus, tractor, locomotive, etc. No changes were made to the definition of "Area source" or "Mobile source" based on this comment.

Comment

The Trades commented that the TCEQ has the flexibility to take a different approach for area sources and that no other state has a program like Texas' program. The Trades stated that over time, the Texas program has evolved to include very state-specific SIP

"true-up" provisions and has also become a mandatory program, as there is no other mechanism by which companies can obtain offsets from other companies to comply with Chapter 116 NNSR permitting requirements. The Trades commented that thus, the current program sometimes functions to disallow reductions otherwise allowed in other states under federal law, which places Texas industry at a competitive disadvantage and results in projects that would have come to Texas being built elsewhere because needed offsets are unavailable. While acknowledging that it is beyond the scope of these comments and this rulemaking to address ERCs generated by stationary sources with emissions included in the Texas EI, the commenter requested that TCEQ not impose the same restrictions on area sources.

Response

The Texas program is different and often more flexible than other such programs. For example, the Louisiana program only allows credits to be generated from sources that can demonstrate reductions of at least one ton per year, a ten-fold increase over the 0.1 ton per year reduction minimum that the Texas rule allows. Because Texas has an incentive program and not just a credit program, the requirements of the federal economic incentive program guidance (EPA-452/R-01-001) have to be met. Since the comment did not provide specific details regarding how the current program may disallow reductions otherwise allowed in other states under federal law, the commission cannot evaluate any particular specific requirement that may need to be considered for revision.

Although it is true that major sources who need offsets for major NNSR nonattainment permitting often obtain those offsets through the EBT program, no individual source is required to participate in this program to generate or use such offsets. There are other options for offsets, including netting and cap and trade allowances for some sites and discrete emission credits for all sites. Individual area sources are not required to participate in this program but can choose to do so. This rulemaking was undertaken at the request of, and with the active participation of many stakeholders who plan to participate in the program and generate credits from emission reductions at sources that have been unable to participate. For these sources to generate credits that can be useful for offsetting purposes, the program has been modified to ensure that reductions from such sources will be real, quantifiable, and surplus to all applicable rules, regulations, and the SIP, as well as enforceable and permanent.

No change to the rules was made in response to this comment.

Comment

The Trades commented that the TCEQ should not use the protocols and methodologies in these rules, combined with the agency's focus on the SIP EI, to exclude otherwise creditable area-source reductions from participating in the program. The Trades expressed concern that the TCEQ is entirely focused on "facilities" (as specific pieces of equipment at a site or account) for which creditable emissions must be determined by following specific protocols. The Trades commented that at present, none of these

protocols specifically include approval of the very methodologies by which companies are to submit EI data per TCEQ EI guidance, but that for purposes of determining whether a "facility" is in the area source or point source inventory, TCEQ looks at overall emissions from the "site" or "account" comprising the point or area source (as those terms are utilized in the EI rules). The Trades commented that this can create situations where facilities at accounts previously considered to be area sources turn out to aggregate to, for example, more than 10 tons of VOC emissions using EBTapproved protocols. The Trades stated that they understand that TCEQ's position is that such facilities at such sources then become ineligible to generate ERCs, based on the logic that the account or site is now a "point source" and the emissions from the facility were not included in the appropriate point source EI, resulting in a "SIP baseline" of zero. The Trades stated that this means that facilities at an area source that collectively add up to nine tpy using EBT protocols can generate ERCs, provided all requirements for the rules are met, but the same facilities at an area source that collectively add up to 11 tpy using the EBT protocols now are completely excluded from the program. The Trades commented that the same is true if emission calculation methodologies change--TCEQ's position would have the effect of excluding needed ERC generation because improved data methodologies would be applied to decisions made years ago regarding permitting or EI submission requirements.

Response

The commission is not intending to use the protocols and methodologies in the EBT rules to exclude otherwise creditable reductions at area source facilities from

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules

Rule Project No. 2016-041-101-AI

generating credits. The protocols required in the EBT rules at §101.302(e)(2) closely

reflect the current EI methods and guidance.

The TCEQ does not issue credits for noncompliant emissions. If a site met the EI

reporting threshold in 30 TAC §101.10 (e.g., 10 tpy of VOC or NO_x emissions for

sites located in an ozone nonattainment area) for the given SIP EI year using that

year's TCEQ EI guidance, but did not submit the required EI, then credits cannot be

generated. It is the site's responsibility to self-report emissions per the rule.

In a few very limited instances, a site's emissions would not meet the §101.10 EI

reporting thresholds for the SIP EI year when determined using TCEQ EI guidance,

but would meet the EI reporting thresholds when determined using EBT protocols.

Under these circumstances, applications will be reviewed on a case-by-case basis to

determine whether credit(s) can be issued in keeping with EPA guidance and TCEQ

rules.

No change to the rules was made in response to these comments.

Mobile Sources

Comment

Gosselink commented that MERC applications have been submitted under the current

rules that the TCEQ had not yet taken action and that these applications should be

allowed to be amended in accordance with the new rules, and MERCs issued where

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

appropriate.

Response

The commission agrees with the commenter that any in-house MERC applications that have not been acted on should be allowed to be amended in accordance with the new rules. Program staff have reached out to applicants with pending applications, both MERCs and MDERCs, requesting additional information in order to process the applications for a final determination upon adoption of this rulemaking. The rules also address the impact of the processing delays associated with the rulemaking on the life of credits. No change to the rules was made in response to this comment.

Comment

Gosselink commented that MERC users should be required to purchase some multiple of the anticipated emissions increase so that the surplus tonnage can be retired. Gosselink commented that this could achieve air quality improvement from this program and that a ratio, or discount rate, similar to but slightly higher than the ratios used for ERCs would be appropriate. Gosselink suggested a discount rate of 1.1 to 1.0 because any higher discount rate crosses over into an area of mathematical disincentive for the seller. Gosselink requested the commission identify the mathematical model that was used to establish the proposed discount rate.

Response

The commission does not agree that an additional discount rate is warranted for the buyers of MERCs in order to achieve air quality improvements from the EBT program since this program is not a reduction strategy. The EBT program is an economic incentive program to allow flexibility to the regulated community that in turn stimulates growth in nonattainment areas without increasing emissions.

The commission did not use a mathematical model to establish the discounts. In the pre-proposal stakeholder process a range of discount rates to mitigate the uncertainty in area and mobile source emission estimates and the possibility of emissions shifting from area source shutdowns was discussed. One of the major concerns staff received during the stakeholder process was that the preliminary discount rates were too onerous and would discourage area and mobile ERC generation.

No change to the rules was made in response to these comments.

Comment

EDF commented that the proposed EBT regulations and administrative procedures may adversely impact industry adoption of advanced NO_x control technologies like those that can control ocean-going vessel hoteling emissions ("stack bonnet technology"), as well as adoption of Tier 4 marine and locomotive engines.

Response

The commission does not agree with the commenter that the EBT regulations and administrative procedures may adversely impact industry adoption of advanced NO_x control technologies. The EBT program is designed to meet the requirements as outlined in the federal economic incentive program guidance (EPA-452/R-01-001). The commission has addressed the concerns with controlling ocean-going vessel hoteling emissions in response to stakeholders' input. As with all credit generation applications, applications including adoption of Tier 4 marine and locomotive engines must demonstrate that reductions are real, quantifiable, permanent, enforceable, and surplus to the SIP and all applicable rules. In such cases the determination of what constitutes surplus to the SIP and applicable rules would include a review of whether the new engine meets or exceeds the current required tier level and whether the old engine has remaining useful life in regards to SIP modeling. No change to the rules was made in response to this comment.

Comment

EDF and H-GAC commented that the TCEQ needs to provide clear guidance on the authorizations needed to operate both stack bonnet technologies (e.g., AMECS or METS-1) and shorepower technologies and that without this information, businesses may not have enough information to be able to justify investment (expected to be in the millions) and communities may not understand how projects are being implemented. H-GAC and the Trades also requested that the TCEQ specify in the rulemaking or other formal process how any residual emissions from implementation of these control technologies would be treated.

Response

The requirements for the authorization of stack bonnet and shorepower technologies are beyond the scope of this rulemaking. The TCEQ supplied general guidance on how the authorization of the stake bonnet technology would be implemented based on current permitting practices in a posting to stakeholders on April 20, 2017. To this point, stakeholders have not provided information that could be used to issue guidance on shorepower technologies. No change to the rules was made in response to these comments.

Comment

EDF commented that the proposed regulations, as currently written, incorrectly use the term "useful life" and should use the term "service life" because useful life is defined in EPA regulations as "the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured ... {and} during which an engine is required to comply with all applicable emission standards." 40 CFR §1042.901. EDF commented that a large (>500 horsepower (hp)) diesel engine is normally remanufactured five or more times at the end of its ten-year or 20,000 operational hours useful life. EDF commented that the TCEQ should delete the references to useful life and substitute the term service life.

Response

The commission understands the commenter's concerns regarding the term useful

life, but does not agree that the term should be replaced with service life. As stated in the rule preamble, the expected useful life is determined based on assumptions included in the applicable SIP revision, such as, but not limited to, parameters used in the on-road mobile model and in the Texas non-road model for calculating fleet turnover. While the commission anticipates that nearly all types of mobile sources are reflected in the models, any mobile source not reflected in these models will be handled on a case-by-case basis, as approved by the executive director. As useful life is necessary to determine if a mobile source emissions reduction is surplus to the SIP, EBT staff will provide guidance on how useful life is determined and the associated mileage or hours for each type of vehicle or equipment. No change to the rules was made in response to this comment.

Comment

EDF commented that while median life is useful for measuring emission projections for a fleet of vessels or locomotives in the SIP, there is still a major problem using it for individual vessels or locomotives in the EBT program and that Caterpillar survey data demonstrated that the service life of tug and switcher engines can easily exceed 50+ years. EDF stated that this is not inconsistent with the 23-year median life for Category 2 marine engines because, by the EPA definition, only 50% of the fleet is scrapped by that 23-year period which means that 50% last longer than 23 years. EDF stated that it appears, again based on the Caterpillar and Rail Inc. data, that EPA underestimated the median life for these large (>500 hp) engines. EDF commented further that, even in cases where a tug owner must replace a Category 2 engine, in

most cases they are allowed by EPA to replace the entire engine with a pre-Tier 4 engine because of space limitations in the engine room. EDF and H-GAC recommended that the TCEQ use a 50-year life for these marine and locomotive engines and require an independent engineering assessment of the tug or switcher engine to determine whether the specific vessel or locomotive engine has the potential to remain in service for this period of time.

Response

The commission understands the commenters' concerns regarding the useful life determination for locomotive and commercial marine vessels but does not agree that the TCEQ should use a 50-year life for commercial marine vessels and locomotives and require an independent engineering assessment. There are specific vehicle or engine life lookup tables from the EPA for the on-road and non-road categories, but not for the large engine categories such as locomotive and commercial marine vessels. The fleet turnover effects modeled by the EPA (in the March 2008 EPA document called *Regulatory Impact Analysis: Control of Emissions of Air Pollution from Locomotive Engines and Marine Compression Ignition Engines Less than 30 Liters Per Cylinder, EPA420-R-08-001*), was included in the modeling work. It has been brought to the attention of TCEQ staff that the EPA might have data beyond the defaults of ten years or 20,000 hours for these engines. TCEQ staff are working with stakeholders to verify the data used in the regulatory impact analysis and will consider adjusting the useful life based on the findings. Since the useful life will be provided by guidance, no change to the rules was made in

response to these comments.

Comment

H-GAC commented that the rule proposal should accurately reflect mobile source baseline emissions that do not assume upgrades were made if they were not legally required of the owner or operator.

Response

Mobile source baseline emissions do not include an assumption that upgrades were made if they were not legally required of the owner or operator. The definition for "Mobile source baseline emissions" is "the mobile source's actual emissions, in tons per year, occurring prior to a mobile emission reduction strategy calculated as the lowest of the historical adjusted emissions or state implementation plan emissions." Assumptions regarding engine upgrades are inputs to the SIP modeling that is the basis for the total quantity of potentially creditable mobile source emissions and the consideration of remaining useful life for each category of equipment. The SIP modeling is based on the best information available to the commission at the time of SIP development. Modeling inputs regarding equipment upgrades are generally based on information supplied by the EPA and beyond the scope of this rulemaking. No change to the rules was made in response to this comment.

Comment

EDF commented that credit adjustments play an important role in ensuring that the

emission reductions meet the FCAA requirements, but in the case of unregulated, Tier 0 and Tier 1 tug and locomotive engines, upgrading these engines to Tier 4 will result in ERCs or DERCs equivalent to only 50% of the actual reductions due to the surplus to SIP requirements. As an example, EDF stated that an unregulated switcher emits 17.4 grams per brake horsepower-hour (g/bhp-hr), but it can only get credit for reductions equivalent to a Tier 2 switcher, which is 8.1 g/bhp-hr. EDF commented that, while the TCEQ cannot change the SIP or surplus to the SIP requirements with the proposed rulemaking, in determining what type of credit adjustments to make for tugs and locomotives the TCEQ should consider that these projects provide an additional 50% reduction in emissions.

Response

The commission understands the commenter's concerns that an applicant reducing emissions with certain types of equipment might not be able to generate credit for the total amount of emissions reduction due to the federal requirement that the emissions be surplus to the SIP. However, the commission does not anticipate that the credit adjustments for shutdowns or use of an alternative protocol are likely to be applied to these types of emission reduction projects. As adopted, there are no other types of credit adjustments. No change to the rules was made in response to this comment.

Comment

EDF commented that owners of marine vessel and locomotive fleets should be given

the option to aggregate their emission reductions across their entire fleets for the generation of ERCs. EDF stated this would be consistent with the existing point source regulations that allow fugitive emissions to be classified under one facility and more importantly, it would provide fleet owners needed flexibility to reposition assets, while still meeting their emission reduction obligations under the EBT program. EDF commented that fleets that want to aggregate their emission reductions should be required to meet a higher standard for monitoring the location of their fleets, e.g., such as Global Positioning Systems, and that the TCEQ should revise the proposal to allow fleets to aggregate their emissions and require location monitoring to ensure reductions are occurring in the area.

Response

The adopted rules allow aggregation of mobile sources to meet the requirement that emission reductions be certified for at least 0.1 ton per year but the mobile sources must be represented on the same application and will have an application deadline and credit expiration date determined by the earliest emission reduction date among the aggregated sources. Any applicable monitoring requirements will be determined on a case-by-case basis and documented in the EBT-CERT for a particular credit certificate. Fleet aggregation may be one of the factors considered in setting case-specific monitoring requirements. No change to the rules was made in response to this comment.

Comment

EDF commented that the TCEQ could be overwhelmed with numerous applications for small credit generation projects and suggested the TCEQ review existing TERP programs and assist in developing opportunities for the smaller mobile source projects, which could reduce the administrative burden on the EBT program.

Response

While the commission encourages participation in voluntary emission reduction programs such as TERP, expanding or revising guidance or other aspects of TERP is beyond the scope of this rulemaking. No change to the rules was made in response to this comment.

Comment

Gosselink commented that one way to encourage replacement or conversion of significantly more vehicles is to permit one vehicle to receive both TERP money (or other grant money) and have a MERC certified for the same conversion/replacement.

Response

Texas Health and Safety Code, (THSC) §386.055 prohibits generating emissions credits on projects funded by TERP. An exception exists at THSC, §386.056, which allows someone in HGB or DFW to generate emission credits from a TERP-funded project if they contribute \$75,000 per ton of emissions and meet other statutory requirements. In addition, in accordance with federal economic incentive program guidance (EPA-452/R-01-001), EBT rules do not allow credits to be generated from

reductions funded through state or federal programs, unless specifically allowed under that program. The EPA guidance indicates that, to generate a credit, a reduction must be surplus to all existing requirements. A TERP grant would be an existing requirement for the grantee as long as the TERP contract is in place. To be creditable, an emission reduction would have to exceed the reduction required under the TERP grant and occur after the TERP contract expired.

TERP is intended to fund emissions reductions. If an emission credit is generated from a TERP-funded reduction, the use of the credit would mean the TERP reduction, with the exception of the amount required by the offset ratio, would not be realized by the airshed. This would weaken the impact of TERP on air quality as well as TERP's effectiveness as an emission reduction strategy. No change to the rules was made in response to this comment.

Comment

Gosselink commented that one significant obstacle that prevents TERP from attracting more applicants is its requirement to destroy the engine or vehicle or ship it out of North America. Gosselink stated that a similar requirement for MERCs not only misses an important and significant funding source (the resale value of the vehicle) that could further incentivize conversions and replacements, but fails to encourage replacing high-emitting vehicles before the end or near-end of their useful lives. Gosselink commented that the fact that the TCEQ will approve shipment of a MERCs vehicle somewhere else rather than require destruction of the engine indicates even the TCEQ

concedes destruction is not the only solution. However, the bar (shipping a diesel vehicle to South America, Africa, or Asia) is unrealistically burdensome financially. Gosselink stated that shipping costs will exceed \$10,000 per truck. Rather than requiring the destruction of the engine or shipping the engine or vehicle out of North America, Gosselink suggested that the MERC program require only that the vehicle be relocated outside of the nonattainment area.

Response

The commission understands that there are large costs involved in transporting vehicles out of North America and that making a mobile source inoperable might be a disincentive to some potential applicants. While TERP is an emission reduction strategy, the EBT program is a voluntary program designed to provide flexibility in meeting state and federal rules. As mentioned elsewhere in the Response to Comments portion of this preamble, all ERCs must be real, permanent, enforceable, quantifiable, and surplus to all applicable rules, regulations, and the SIP. To minimize the risks to end users, such as Title V permit holders, and to minimize tracking and recordkeeping for credit generators, the commission requires that mobile sources be made permanently inoperable or permanently removed from North America. No change to the rules was made in response to this comment.

Comment

Gosselink commented that there is no EPA requirement to destroy the engine and that San Diego County has a rule which the EPA reviewed and approved which expressly allows relocation. Gosselink commented that Texas should take the same approach, or explain why this approach is not applicable in Texas.

Response

The commission agrees with the commenter that there is no EPA requirement to destroy the engine, although the EBT program must meet the criteria of permanent and enforceable as required in the federal economic incentive program guidance (EPA-452/R-01-001). TCEQ staff have researched and not been able to confirm that the approved San Diego project was ever actually implemented or used. In addition, discussions with EPA Region 6 staff indicated that this would not be a viable option to meet the permanent and enforceable requirement. No change to the rules was made in response to this comment.

Comment

Gosselink commented that contractual and regulatory obligations are deemed fully enforceable in the legal system and in all other TCEQ regulatory arenas and that they are sufficient for the purpose of relocation of mobile sources that participate in the EBT program. Gosselink questioned what part of the proposed contract enforcement protections does the TCEQ believe are unworkable and why.

Response

The commission understands that contractual and regulatory obligations are deemed fully enforceable in the Texas legal system and in all other TCEQ

regulatory arenas. In the absence of mechanisms to track and enforce the compliance with such agreements, the commission does not agree that contracts are sufficient in this case to ensure that the reductions used to generate credits would be real, permanent, and enforceable. As discussed in a previous response, in order to be approvable, emission reductions must be real, permanent, enforceable, quantifiable, and surplus to all applicable rules, regulations, and the SIP.

Additionally, the commission is required under the FCAA to enforce the SIP or be faced with federal enforcement and potential sanctions. The commission has determined that the adopted rules provide the most efficient and practicable mechanisms to address the SIP approvability criteria in order to ensure that the emission reductions and their use remain state and federally enforceable. No change to the rules was made in response to this comment.

Comment

Gosselink commented that there may be certain types of entities that can be inherently trusted to not bring used vehicles back into nonattainment areas, such as a municipality. Gosselink stated that certain types of vehicles are not likely to be relocated back into the nonattainment area and once these vehicles have been relocated, there should be no need to prove that the equipment is still outside of the nonattainment area. Gosselink suggested that self-certification should be acceptable to demonstrate that the reduction is permanent in these cases.

Response

The commission understands that there may be some entities that would pose less risk of bringing vehicles back to a nonattainment area, but does not agree that self-certification could be used as an alternative to requiring the vehicle or equipment be made permanently inoperable. Once the mobile source is sold to another party, self-certification would not be an option. Requiring tracking, monitoring, and site visits to ensure compliance is not feasible and once a noncompliance issue arises, the credit end user would then be out of compliance. No change to the rules was made in response to this comment.

Comment

Gosselink commented that applicants should have the flexibility to choose to be issued either MDERCs or MERCs.

Response

The EBT program has historically differentiated between MERCs and MDERCs to reflect the essential difference in the actions used to reduce emissions. MERCS are generated from permanent emissions reductions (and thus issued in tpy) while MDERCs are generated from temporary emissions reductions (and issued in tons). As long as the other requirements are met, MDERCs may be issued for emission reductions that have occurred in the past and are no longer occurring. In addition, MERCs can only be generated in nonattainment areas while MDERCS can be generated in both attainment and nonattainment areas. The commission's practice has been that permanent emission reductions are evaluated as MERCs to be

consistent with federal economic incentive guidelines. No change to the rules was made in response to this comment.

Comment

Gosselink commented that in the event that destruction of the vehicle or engine is elected, that it be clear that the non-emission parts of the vehicle (body, suspension, frame, etc.) could still be salvaged and sold.

Response

The commission agrees with the commenter that non-emission parts of the vehicle could still be salvaged and sold. The rules do not prohibit this practice. No change to the rules was made in response to this comment.

Comment

Gosselink commented that in addition to the contractual enforcement mechanisms, the TCEQ, in conjunction with the Texas Department of Motor Vehicles (TxDMV), could implement certain regulatory requirements to deter potential violators from reimporting the vehicle that was sold and shipped out of the nonattainment airshed. The applicant would place a cloud on the title of the vehicle, similar in nature to a salvage title, and could be combined with an easily identifiable license plate. Gosselink stated that a system already exists to add one more "brand" or cloud on a title through the National Motor Vehicle Title Information System which provides all state's motor vehicle titling agencies access to title histories. Gosselink stated that states consult this

national database prior to issuing new titles within the state and that Texas maintains a parallel tracking system, called the Registration and Title System. Gosselink stated that through these systems, the vehicle can be tracked even if it is sold and registered in another state. Gosselink also commented that if the TCEQ is concerned that a buyer might re-register the vehicle in a different state while, nonetheless, operating it in Texas, a vehicle with a MERC cloud on its title could be required to have an easy to spot marking (decal, painting, license plate, large lettering or some more technically sophisticated device) in the same way that many vehicles are presently "branded" with decals. Gosselink requested the TCEQ explain why wouldn't this system provide a solution that sufficiently protects the nonattainment area from the risk that trucks will be reimported back into the nonattainment region in a quantity to actually impact air quality enough to impact SIP compliance.

Response

The commission does not have authority to require rulemaking by other agencies, and implementing the Gosselink suggested approach would require coordination with and potentially rulemaking by other agencies. Because the commission did not propose such an option, which would have fiscal implications for the TCEQ, other state agencies, and other affected parties that were not reflected in the proposed rule's fiscal note, these entities have not had the opportunity to comment on the suggested approach or the costs associated with it. Such an approach might be able to limit reentry of vehicles into the nonattainment area to a level that would not impact SIP compliance, however, the fiscal implications could be significant.

Without adequate resources to implement the suggested approach with sufficient oversight, the commission's ability to ensure that the federal economic incentive program requirements of permanent reductions would be in question. No change to the rules was made in response to these comments.

Comment

Gosselink commented that the TCEQ could pursue violators (of alternatives to vehicle or engine destruction) as an environmental crime and/or lobby for increased fines and vehicle impoundment.

Response

State agencies are prohibited from lobbying, per Texas Government Code, §556.006. The TCEQ can only enforce against violators that can be identified and there would be additional resource implications of adequately overseeing this type of enforcement mechanism. The fiscal implications could be significant and without adequate resources to implement this enforcement option with sufficient oversight, the commission's ability to ensure that the federal economic incentive program requirement of permanent reductions would be in question. No change to the rules was made in response to this comment.

Comment

Gosselink commented that a program already exists that could be used to prevent a waste vehicle from being reintroduced to a nonattainment area in that the TCEQ's

municipal solid waste registration team already has in place a registration requirement for municipal sludge(s) and similar wastes, and that similar registration obligations exist at the city level too (e.g. City of Houston). Gosselink stated that if a city's registration requirement does not already apply to waste vehicles, it would be very easy to add these trucks to the list of waste vehicles that must be registered. When a waste vehicle is added to a fleet in a nonattainment area, the TCEQ and/or the city could easily check the VIN number against a list of vehicles that have been replaced and awarded MERCs. Gosselink requested that the TCEQ explain what about this idea or process makes it unenforceable or unlikely to provide the desired deterrent.

Response

The waste vehicle registration program described by the commenter does not appear to apply to all engines and related equipment and thus would only provide a partial solution to tracking credit generating mobile sources. The commenter provides no information regarding compliance with current limited registration requirements, how a registration requirement would ensure that a vehicle or piece of equipment was not relocated back into a nonattainment area, the potential burden on owners of waste equipment that currently don't have to be registered, or an assessment of the administrative burden for commission staff to audit or enforce such a registration system. In the absence of mechanisms to track and enforce the compliance with such agreements, the commission does not agree that the agreements are sufficient to ensure that the reductions used to generate credits would be real, permanent, and enforceable. Additionally, the adopted rules provide

adequate alternatives for ensuring that the emission reductions meet SIP approvability requirements. No change to the rules was made in response to this comment.

Comment

Gosselink commented that drayage trucks have a disproportionately significant impact on ozone concentrations in the HGB area because of the location of the Port of Houston southeast of downtown and because many of the approximately 3,000 vehicles are older models (some 50 years old) with significantly higher rates of emission. Gosselink stated these combined factors make converting and/or replacing drayage vehicles a high priority, if emission reductions is the goal and MERCs should be part of the solution. Gosselink stated special consideration about how to include drayage trucks in the MERCs program past the end of their normal useful lives needs to be developed. Gosselink requested that the TCEQ explain what other programs will the TCEQ use to reduce emissions from drayage vehicles that are different from existing programs, since the existing programs only provide marginal improvement in NO_x emission reductions.

Response

The commission disagrees with the commenter's assertion that drayage trucks may have a disproportionately significant impact on ozone concentrations in the HGB area. The EPA conducted a study that tracked approximately half a million vehicle movements at the Port of Houston from 2008 - 2010. The study results indicated

that only 0.3% of this truck activity was performed by trucks older than 25 years. Since the overall population of older, higher-emitting trucks is extremely small, disproportionate impacts to HGB area ozone concentrations are unlikely to occur.

In regards to allowing special considerations for including drayage trucks in the MERC program, vehicles that are past their normal useful or operational life are accounted for in fleet turnover which means those vehicles' emissions reductions are not surplus to the SIP, a requirement of the federal economic incentive program guidance (EPA-452/R-01-001). In addition, the EBT program is an economic incentive program, not an emissions reduction strategy. However, the TCEQ Drayage Truck Incentive program is an emission reduction strategy that is available to provide financial incentives for the replacement of older drayage trucks operating at seaports and Class I rail yards in areas of Texas designated as nonattainment areas under the FCAA. For more information, please visit: https://www.tceq.texas.gov/airquality/terp/drayage-truck-incentive-program-dtip.
No change to the rules was made in response to these comments.

Comment

Gosselink commented that the current version of the EPA Motion Vehicle Emission Simulator (MOVES) model contains the following HGB area vehicle populations between 10 and 30 years old: 1,069 drayage trucks; 1,625 waste-hauling vehicles, and 611 transit buses. Gosselink stated that they have not sought to verify the number of actual vehicles on the road, but that there is consensus among "Fleet Commenters"

that these MOVES model estimates are too low with respect to both the number of vehicles on the road and their relative age. Gosselink attached a November 23, 2016 memo from the Zephyr Environmental Corporation as the source of these 2006-and-older vehicle population estimates and asked if the TCEQ disputes the number of vehicles listed by the MOVES model.

Response

The commission is unable to validate the commenter's claim because neither the commenter nor the Zephyr memo provided sufficient information about the original source of these vehicle population estimates for the TCEQ to be able to confirm validity. When run in default mode, the MOVES model does generate output containing vehicle population estimates by model year. In accordance with EPA guidance, the TCEQ does not use default vehicle population estimates from the MOVES model when developing emission inventories for SIPs. Instead, MOVES is used to generate emission rates that are separately multiplied by local activity data inputs such as vehicle miles traveled (VMT), vehicle population, etc.

The raw source of the vehicle population inputs used by the TCEQ are registration database queries done by the TxDMV. The December 2016 HGB area attainment SIP estimated that there are 1,380 transit buses from 2006-and-earlier model years operating in eight-county HGB during 2017. This is more than double the 611 transit bus figure referenced by the commenter. The 2006-and-older estimate for refuse trucks is 2,476 compared with the 1,625 figure referenced by the

commenter. Since neither the MOVES model nor the TxDMV registration database has a line-item code for "drayage trucks," it is impossible to confirm or deny that there are 1,069 drayage trucks operating in HGB from the 2006-and-earlier model years. Instead, drayage trucks are typically "eighteen-wheelers" that are locally operated to/from ports rather than being used for "long-haul" activity. This makes drayage vehicles a subset of the MOVES combination short-haul truck short use types that is defined as having a majority of its operation within 200 miles of a home base. It is estimated that there are 11,677 combination short-haul trucks from the 2006-and-older model years operating in the HGB area during 2017. A subset of 1,069 drayage trucks from 2006-and-older model years could plausibly be included under this broader category. No changes were made in response to this comment.

Comment

Gosselink attached a November 23, 2016, memo from Zephyr Environmental Corporation entitled "Truck Emission Rates" and asked if the TCEQ disputes the accuracy of the calculations for the annual tons of NO_x that could be reduced from the reported vehicle replacement scenarios. Gosselink requested the TCEQ explain how any existing program will better incentivize replacement of these vehicles.

Response

The commission is unable to confirm or deny the accuracy of the reported NO_x replacement benefits because the Zephyr memo provided by the commenter does not provide sufficient information. For such an analysis, the following minimum

information needs to be provided: the emission rate for the "old" vehicle to be replaced; the emission rate for the "new" replacement vehicle; and the VMT accumulated on either a daily or annual basis.

Although this comment is out of the scope of this rulemaking, to address incentivizing replacements of these types of vehicles, through August 2016, the commission has spent over \$1 billion under the TERP on projects to replace or upgrade on-road vehicles, non-road equipment, marine vessels, locomotives, and certain stationary equipment. These projects are estimated to reduce NO_x emissions by over 170,000 tons. Through TERP, there are multiple programs that specifically provide financial incentives for heavy-duty trucks and TERP is a viable alternative as an emissions reduction strategy. No changes were made in response to this comment.

Comment

Gosselink strongly recommended that the no vehicle minimum be included in the MERCs rules.

Response

The commission agrees with the commenter that no vehicle minimum should be included in the MERCs rules. The rules do not provide a vehicle minimum in order to participate in generating MERCs. No change to the rules was made in response to this comment.

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

Oil and Gas

Comment

EDF commented that since production equipment (e.g., tanks) often have dramatic declining throughput as the wells that feed them age and production declines, using historical baselines of emissions to project emission reductions could easily result in overstating achievable reductions. EDF stated emission sources directly influenced by declining well production levels should either be disallowed from utilizing EBT credits, or the TCEQ should develop an emission discount that accurately reflects the source's emissions during the time of credit use.

Response

The commission acknowledges that upstream oil and gas production can experience variable production levels throughout the lifespan of a well. However, all wells do not necessarily experience dramatic declines in production. Since wells are significant economic investments (costing approximately \$4 to \$8 million to drill, complete, and initially produce), companies can perform one or more well workovers or in the case of shale wells, refractures, to increase production during the life of a well. Similar equipment life spans and similar variation in production activity can also be observed at other types of industrial emissions sources, often in response to local, regional, or national economic growth and contraction.

Regarding the development of a discount for upstream oil and gas sources, per

TCEQ rule, the ERC amount for a facility is limited to the lower of the facility's historical adjusted emissions or SIP year emissions. Although a facility's baseline emissions may exceed its current emissions due to market conditions or other economic considerations, the credit issued will not exceed its SIP year emissions. This fulfills the EPA requirement that the credited emissions reduction is surplus to the SIP. No change to the rules was made in response to this comment.

Comment

EDF commented that to generate an area source credit, the TCEQ should require that operators demonstrate oversight practices that ensure a 95% performance or an additional discount needs to be applied for expected underperformance and/or system malfunction.

Response

The commission does not agree that the rules should require that operators demonstrate oversight practices that ensure a 95% performance or that an additional discount should be applied for underperformance and/or system malfunction. The commission does not consider these requirements necessary as the rules require that credit generators comply with special conditions that will be enumerated in the site's authorization or the EBT-CERT. The purpose of an EBT-CERT is to set in place any requirements that are necessary to ensure that the credited emission reduction remains real, quantifiable, and permanent. Thus, the EBT program staff evaluating credit applications will establish the requirements

necessary to ensure that the credited emission reduction is maintained on a caseby-case basis, and those requirements will be documented with a federally enforceable mechanism. No change to the rules was made in response to this comment.

Comment

The Trades supported the agency's efforts to incentivize well plugging, but because the TCEQ is currently proposing that creditable area source emissions be determined on a per-equipment basis, there is a conflict between the oil and gas shutdown provision and TCEQ's proposed FIN-by-FIN policy. The Trades stated that the TCEQ should allow the one year plugging requirement to serve as an alternate governing trigger date for emissions reduction credit applications, in addition to individual equipment shutdown dates; alternatively, TCEQ should clarify that the one year plugging requirement takes precedent over a FIN-by-FIN analysis.

Response

The commission appreciates the support of the provisions designed to incentivize well plugging. To clarify, the adopted well plugging incentive provision at §101.303(d)(1)(C) takes precedence over the usual FIN-by-FIN application and credit expiration deadlines. A FIN-by-FIN analysis is still required to calculate the quantity of credits to be certified.

The adopted provision at §101.303(d)(1)(C) allows credit generation applications for

facilities affected by a complete production site shutdown to be submitted two years after the site's production well is plugged (as opposed to two years after the individual facility's emission reduction date) when the well is plugged in accordance with the technical specifications required by the Railroad Commission of Texas and when the plugging is completed within one year of final production being reported to the Railroad Commission of Texas. In addition, the "lookback" for establishing historical adjusted emissions would also be set based on the date the well is plugged. Emission credits certified under this exception would be available for use for 72 months from the date well plugging is completed for the site.

No change to the rules was made in response to this comment.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 1: EMISSION CREDIT PROGRAM

§§101.300, 101.302 - 101.304, 101.306

Statutory Authority

The amended sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, TWC, §5.103, concerning Rules, and TWC, §5.105, concerning General Policy, that authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The rulemaking is adopted under THSC, §382.002, concerning Policy and Purpose, that establishes the commission's purpose to safeguard the state air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; THSC, §382.014, concerning Emission Inventory, that authorizes the commission to require a person whose activities cause air contaminant emissions to submit information to enable the commission to develop an emissions inventory; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; and THSC,

§382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The amended sections are also adopted under THSC, §382.023, concerning Orders, and THSC, §382.036, concerning Cooperation and Assistance. The rulemaking is also adopted under Federal Clean Air Act, 42 United States Code, §§7401, *et seq.*, which requires states to submit state implementation plan revisions that specify the manner in which the national ambient air quality standard will be achieved and maintained within each air quality control region of the state.

The adopted amendments implement THSC, §§382.002, 382.011, 382.012, 382.014, 382.016, 82.017. 382.021, 382.023, and 382.036.

§101.300. Definitions.

Unless specifically defined in the Texas Clean Air Act or in §3.2 or §101.1 of this title (relating to Definitions), the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition, the following words and terms, when used in this division, have the following meanings, unless the context clearly indicates otherwise.

(1) Activity--The amount of activity at a facility or mobile source measured in terms of production, use, raw materials input, vehicle miles traveled, or other similar units that have a direct correlation with the economic output and emission rate of the facility or mobile source.

- (2) Actual emissions--The total emissions during a selected time period, using the facility's or mobile source's actual daily operating hours, production rates, or types of materials processed, stored, or combusted during that selected time period.
- (3) Area source--Any facility included in the agency emissions inventory under the area source category.
- (4) Baseline emissions--The facility's emissions, in tons per year, [occurring] before implementation of an emission reduction [strategy] calculated as the lowest of the facility's historical adjusted emissions or state implementation plan emissions.
- (5) Certified--Any emission reduction that is determined to be creditable upon review and approval by the executive director.
- (6) Curtailment--A reduction in activity level at any facility or mobile source.
- (7) Emission credit--An emission reduction credit or mobile emission reduction credit.

- (8) Emission rate--The facility's rate of emissions per unit of activity.
- (9) Emission reduction-- \underline{A} [An actual] reduction in <u>actual</u> emissions from a facility or mobile source.
- (10) Emission reduction credit--A certified emission reduction, expressed in tenths of a ton per year, that is created by eliminating future emissions and quantified during or before the period in which emission reductions are made from a facility.
- (11) Emission reduction strategy--The method implemented to reduce the facility's or mobile source's emissions beyond that required by state or federal law, regulation, or agreed order.
- (12) Facility--As defined in §116.10 of this title (relating to General Definitions).
- (13) Generator--The owner or operator of a facility or mobile source that creates an emission reduction.

Rule Project No. 2016-041-101-AI

(14) Historical adjusted emissions--The [facility's] emissions occurring before implementation of an emission reduction strategy and adjusted for any local, state, or federal requirement, calculated using the following equation.

Figure: 30 TAC §101.300(14)

[Figure: 30 TAC §101.300(14)]

$$E_H = \frac{(A_1 \times ER_1) + (A_2 \times ER_2)}{2}$$

Where:

 E_H = The historical adjusted emissions [for a facility].

 A_1 = The [facility's] activity during the first of any two consecutive calendar years selected in accordance with §101.303(b)(2) or §101.304(b)(3) of this title (relating to Emission Reduction Credit Generation and Certification or Mobile Emission Reduction Credit Generation and Certification), not to exceed any applicable local, state, or federal requirement.

 ER_1 = The [facility's] emission rate during the first of any two consecutive calendar years selected in accordance with §101.303(b)(2) or §101.304(b)(3) of this title, not to exceed any applicable local, state, or federal requirement.

 A_2 = The [facility's] activity during the second of any two consecutive calendar years selected in accordance with §101.303(b)(2) or §101.304(b)(3) of this title, not to exceed any applicable local, state, or federal requirement.

 ER_2 = The [facility's] emission rate during the second of any two consecutive calendar years selected in accordance with §101.303(b)(2) or §101.304(b)(3) of this title, not to exceed any local, state, or federal requirement.

(15) Mobile emission reduction credit--A certified emission reduction from a mobile source <u>or group of mobile sources</u>, expressed in <u>tenths of a ton</u> [tons] per year, that is created by eliminating future emissions and quantified during <u>or</u> [and]

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

before the period in which reductions are made from that mobile source <u>or group of mobile sources</u>.

- (16) Mobile source--A source included in the agency's emissions inventory under the mobile source category [On-road (highway) vehicles (e.g., automobiles, trucks, and motorcycles) and non-road vehicles (e.g., trains, airplanes, agricultural equipment, industrial equipment, construction vehicles, off-road motorcycles, and marine vessels)].
- (17) Mobile source baseline activity--The level of activity of a mobile source based on an estimate for each year for which the credits are to be generated. After the initial year, the annual estimates should reflect:
- (A) the change in the mobile source emissions to reflect any deterioration in the emission control performance of the participating source;
- (B) the change in the number of mobile sources resulting from normal retirement or attrition, and the replacement of retired mobile sources with newer and/or cleaner mobile sources;
- (C) the change in usage levels, hours of operation, or vehicle miles traveled in the participating population; and

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

- (D) the change in the expected useful life of the participating population.
- (18) Mobile source baseline emissions--The mobile source's actual emissions, in tons per year, occurring prior to a mobile emission reduction strategy calculated as the <u>lowest of the historical adjusted emissions or state implementation</u> <u>plan emissions</u> [product of mobile source activity and the mobile source emissions rate not to exceed all limitations required by applicable local, state, and federal rules and regulations].
- (19) Mobile source baseline emission rate--The mobile source's rate of emissions per unit of mobile source baseline activity during the mobile source baseline emissions period.
- (20) Permanent--An emission reduction that is long-lasting and unchanging for the remaining life of the facility or mobile source. Such a time period must be enforceable.
- (21) Point source--A facility included in the agency's emissions inventory under the point source category.
- (22) Primarily operated--When the activity is at least 75% 85% within a specific nonattainment area.

(23) Projection-base year--The year of the emissions inventory used to project or forecast future-year emissions for modeling point sources in a state implementation plan revision.

(24) [(21)] Protocol--A replicable and workable method of estimating emission rate or activity level used to calculate the amount of emission reduction generated or credits required for facilities or mobile sources.

(25) [(22)] Quantifiable--An emission reduction that can be measured or estimated with confidence using replicable methodology.

(26) [(23)] Real reduction--A reduction in which actual emissions are reduced. Emissions reductions that result from any of the following are not considered a real reduction:

(A) lowering the allowable emission limit in a permit without a physical change or change in method of operation;

(B) shifting a vent gas stream or other pollution or waste stream to another site;

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

(C) a mobile source that is not capable of being operated as intended; or

(D) a change in an emissions factor or emissions calculation equation.

(27) [(24)] Shutdown--The permanent cessation of an activity producing emissions at a facility or mobile source.

(28) [(25)] Site--As defined in §122.10 of this title (relating to General Definitions).

(29) [(26)] State implementation plan--A plan that provides for attainment and maintenance of a primary or secondary national ambient air quality standard as adopted in 40 Code of Federal Regulations Part 52, Subpart SS.

(30) State implementation plan (SIP) emissions--SIP emissions are determined as follows.

(A) For point sources, SIP emissions are facility-specific values
based on the emissions data in the state's annual emissions inventory (EI) for the year
used to develop the projection-base year inventory for the modeling included in an
attainment demonstration (AD) SIP revision, used for the attainment inventory for a

maintenance plan SIP revision, or used in an EI SIP revision, as applicable under subparagraph (B)(i) - (iii) of this paragraph. For area and mobile sources, SIP emissions are calculated values based on actual operations during the latest triennial National Emissions Inventory (NEI) year used to support an AD SIP revision, used for the attainment inventory for a maintenance plan SIP revision, or used in an EI SIP revision, as applicable under subparagraph (B)(i) - (iii) of this paragraph. For point, area, and mobile sources located in a nonattainment area without an applicable SIP as determined under subparagraph (B)(i) - (iii) of this paragraph, SIP emissions are based on the year of the most recent NEI submitted to the United States Environmental Protection Agency (EPA) preceding that area's nonattainment designation for the current National Ambient Air Quality Standard (NAAOS).

(B) The applicable SIP revision must be for the nonattainment area where the facility is located, or for mobile sources where the mobile source is primarily operated, and must be for the criteria pollutant, or include the precursor pollutant, for which the applicant is requesting credits. The applicable SIP revision is:

(i) an AD SIP revision or a maintenance plan SIP revision, whichever was most recently submitted to the EPA for the current NAAQS;

(ii) if the SIP revisions identified in clause (i) of this subparagraph have not been submitted to the EPA, an AD SIP revision or a maintenance plan SIP revision, whichever was most recently submitted to the EPA for

an earlier NAAQS issued in the same averaging time and the same form as the current NAAQS; or

(iii) if the SIP revisions identified in clauses (i) and (ii) of this subparagraph have not been submitted to the EPA, the most recent EI SIP revision submitted to the EPA.

(C) The total amount of SIP emissions available for credit generation will be set for area, non-road mobile, and on-road mobile source categories.

(i) Total creditable area source emissions are 75% of the total area source emissions excluding residential area sources in the applicable SIP revision.

(ii) Total creditable non-road mobile source emissions are 75% of the total non-road mobile source emissions in the applicable SIP revision.

(iii) Total creditable on-road mobile source emissions are 85% of the total on-road mobile source emissions in the applicable SIP revision.

(D) The SIP emissions for a facility or mobile source may not exceed any applicable local, state, or federal requirement.

(E) The year used to determine SIP emissions is as specified in subparagraph (A) of this paragraph, unless a different year is specifically identified otherwise by the commission in the most recent SIP revision adopted after December 31, 2017.

[(27) State implementation plan (SIP) emissions--The emissions data in the state's emissions inventory (EI) required under 40 Code of Federal Regulations Part 51, Subpart A for the year used to represent the facility's emissions in a SIP revision. The applicable SIP revision must be for the nonattainment area where the facility is located and must be for the criteria pollutant, or include the precursor pollutant, for which the applicant is requesting credits. The SIP emissions may not exceed any applicable local, state, or federal requirement. A facility's SIP emissions are determined from the EI year that:]

[(A) was used to develop the projection-base year inventory for the modeling included in an attainment demonstration (AD) SIP revision or the attainment inventory for a maintenance plan SIP revision, whichever was most recently submitted to the United States Environmental Protection Agency (EPA) for the current National Ambient Air Quality Standard (NAAQS);]

[(B) if the SIP revisions identified in subparagraph (A) of this paragraph have not been submitted to the EPA, was used to develop the projection-base year inventory for the modeling included in an AD SIP revision or the attainment

Texas Commission on Environmental Quality Chapter 101 - General Air Quality Rules Rule Project No. 2016-041-101-AI

inventory for a maintenance plan SIP revision, whichever was most recently submitted to the EPA for an earlier NAAQS issued in the same averaging time and the same form as the current NAAQS;]

[(C) if the SIP revisions identified in subparagraphs (A) and (B) of this paragraph have not been submitted to the EPA, corresponds to the EI for the most recent EI SIP revision submitted to the EPA; or]

[(D) if the SIP revisions identified in subparagraphs (A) - (C) of this paragraph have not been submitted to the EPA, corresponds to the EI that will be used for the EI SIP revision that will be submitted to the EPA.]

(31) [(28)] Strategic emissions--A facility's or mobile source's new allowable emission limit, in tons per year, following implementation of an emission reduction strategy.

(32) [(29)] Surplus--An emission reduction that is not otherwise required of a facility or mobile source by any applicable local, state, or federal requirement and has not been otherwise relied upon in the state implementation plan.

(33) [(30)] User--The owner or operator of a facility or mobile source that acquires and uses emission credits to meet a regulatory requirement, demonstrate compliance, or offset an emission increase.

§101.302. General Provisions.

- (a) Applicable pollutants.
- (1) An emission [reduction] credit [(ERC)] may be generated from a reduction of a criteria pollutant, excluding lead, or a precursor of a criteria pollutant for which an area is designated nonattainment.
- (2) An emission credit [ERC] generated from the reduction of one pollutant or precursor may not be used to meet the requirements for another pollutant or precursor, except as provided by §101.306(d) of this title (relating to Emission Credit Use).
- [(2) Reductions of criteria pollutants, excluding lead, or precursors of criteria pollutants for which an area is designated nonattainment, may qualify as mobile emission reduction credits (MERCs). MERCs generated from reductions of one pollutant may not be used to meet the requirements for another pollutant, unless urban airshed modeling demonstrates that one ozone precursor may be substituted for another, subject to executive director and United States Environmental Protection Agency (EPA) approval.]

(b) Eligible generator categories. The following categories are eligible to generate

emission credits:

(1) facilities, including both point and area sources;

(2) mobile sources; and

(3) any facility, including both point and area sources, or mobile source

associated with actions by federal agencies under 40 Code of Federal Regulations Part

93, Subpart B, Determining Conformity of General Federal Actions to State or Federal

Implementation Plans.

(c) Ineligible generator categories. The following categories are not eligible to

generate emission credits:

(1) residential area sources;

(2) facilities or mobile sources that do not have records for approved or

approvable methods to quantify emissions;

(3) on-road mobile sources that are not part of an industrial, commercial,

nonprofit, institutional, or municipal/government fleet; and

- (4) mobile sources that are not primarily operated within a specific nonattainment area with the exception of marine and locomotive sources that use capture and control emissions reduction systems.
 - (d) [(c)] Emission credit requirements.
- (1) An <u>emission reduction credit (ERC)</u> [ERC] is a certified emission reduction that:
- (A) must be enforceable, permanent, quantifiable, real, and surplus;
- (B) must be surplus at the time it is created, as well as when it is used; and
- (C) must occur after the [year used to determine the] state implementation plan (SIP) emissions <u>year</u> for the facility. <u>Facilities</u> <u>Individual facilities</u> that were not operated during the SIP emissions year may not be used to generate <u>ERCs.</u>
- (2) Mobile emission reduction credits (MERCs) are certified reductions that meet the following requirements:

- (A) reductions must be enforceable, permanent, quantifiable, real, and surplus;
- (B) the certified reduction must be surplus at the time it is created, as well as when it is used;
- (C) in order to become certified, the reduction must have occurred after the <u>SIP</u> [most recent year of] emissions <u>year</u> [inventory used in the SIP]; <u>and</u>
- (D) the <u>reduction must be from a mobile source that operated</u>

 <u>during [source's annual emissions prior to the emission credit application must have been represented in the emissions inventory used in] the SIP <u>emissions year.</u> [; and]</u>
- [(E) the mobile sources must been included in the attainment demonstration baseline emissions inventory.]
- (3) Emission reductions from a facility or mobile source that are certified as emission credits under this division cannot be recertified in whole or in part as credits under another division within this subchapter.
 - (e) [(d)] Protocol.

- (1) All generators or users of emission credits shall use a protocol that has been submitted by the executive director to the <u>United States Environmental</u>

 Protection <u>Agency (EPA)</u> [EPA] for approval, if existing for the applicable facility or mobile source, to measure and calculate baseline emissions. If the generator or user wishes to deviate from a protocol submitted by the executive director, EPA approval is required before the protocol can be used. Protocols must be used as follows.
- (A) The owner or operator of a facility subject to the emission specifications under §§117.110, 117.310, 117.410, 117.1010, 117.1210, 117.1310, 117.2010, or 117.2110 of this title (relating to Emission Specifications for Attainment Demonstration; Emission Specifications for Eight-Hour Attainment Demonstration; and Emission Specifications) shall use the testing and monitoring methodologies required under Chapter 117 of this title (relating to Control of Air Pollution from Nitrogen Compounds) to show compliance with the emission specification for that pollutant.
- (B) The owner or operator of a facility subject to the requirements under Chapter 115 of this title (relating to Control of Air Pollution from Volatile Organic Compounds) shall use the testing and monitoring methodologies required under Chapter 115 of this title to show compliance with the applicable requirements.
- (C) Except as specified in subparagraphs (A) and (B) of this paragraph, the owner or operator of a facility subject to the requirements under

 Chapter 106 of this title (relating to Permits by Rule) or a permit issued under Chapter

116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) shall use the testing and monitoring methodologies required under Chapter 106 of this title or a permit issued under Chapter 116 of this title to demonstrate compliance with the applicable requirements.

(D) [(C)] The executive director may approve the use of a methodology approved by the EPA to quantify emissions from the same type of facility or mobile source.

(E) [(D)] Except as specified in subparagraph (D) [(C)] of this paragraph, if the executive director has not submitted a protocol for the applicable facility or mobile source to the EPA for approval, the following requirements apply:

(i) the amount of emission credits from a facility or mobile source, in tons per year, will be determined and certified based on quantification methodologies at least as stringent as the methods used to demonstrate compliance with any applicable requirements for the facility or mobile source;

(ii) the generator shall collect relevant data sufficient to characterize the facility's or mobile source's emissions of the affected pollutant and the facility's or mobile source's activity level for all representative phases of operation in order to characterize the facility's or mobile source's baseline emissions;

(iii) the owner or operator of a facility with a continuous emissions monitoring system or predictive emissions monitoring system in place shall use this data in quantifying emissions;

(iv) the chosen quantification protocol must be made available for public comment for a period of 30 days and must be viewable on the commission's website;

(v) the chosen quantification protocol and any comments received during the public comment period must be submitted to the EPA for a 45-day adequacy review; and

(vi) quantification protocols may not be accepted for use with this division if the executive director receives a letter objecting to the use of the protocol from the EPA during the 45-day adequacy review or the EPA adopts disapproval of the protocol in the *Federal Register*.

(2) If the monitoring and testing data specified in paragraph (1) of this subsection is missing or unavailable, the generator or user shall determine the facility's emissions for the period of time the data is missing or unavailable using the most conservative method for replacing the data and these listed methods in the following order:

- (A) continuous monitoring data;

 (B) periodic monitoring data;

 (C) testing data;

 (D) manufacturer's data;

 (E) EPA Compilation of Air Pollution Emission Factors (AP-42),

 September 2000; or

 (F) material balance.
- (3) When quantifying actual emissions in accordance with paragraph (2) of this subsection, the generator or user shall submit the justification for not using the methods in paragraph (1) of this subsection and submit the justification for the method used.
 - (f) [(e)] Credit certification.
- (1) The amount of emission credits in tons per year will be determined and certified to the nearest tenth of a ton per year. <u>Credits will not be issued for a an individual</u> facility, fugitive emissions from aggregated facilities, or aggregated mobile

sources that cannot generate at least 0.1 ton per year of credit after all adjustments are applied. Fugitive emissions or mobile source emissions aggregated to meet the requirement that emission reductions be certified for at least 0.1 ton per year must be represented on the same application and will have an application deadline and credit expiration date determined by the earliest emission reduction date among the aggregated sources.

- (2) The executive director shall review an application for certification to determine the credibility of the reductions. Each ERC <u>or MERC</u> certified will be assigned a certificate number. A new number will be assigned when an ERC <u>or MERC</u> is traded or partly used. Reductions determined to be creditable and in compliance with all other requirements of this division will be certified by the executive director.
- (3) The applicant will be notified in writing if the executive director denies the emission credit application. The applicant may submit a revised application in accordance with the requirements of this division. If a facility's or mobile source's actual emissions exceed any applicable local, state, or federal requirement, reductions of emissions exceeding the requirement may not be certified as emission credits. An application for certification of emission credit from reductions quantified under subsection $\underline{(e)(1)(E)}[(d)(1)(D)]$ of this section may only be approved after the EPA's 45-day adequacy review of the protocol.

(g) Credit application submission and conditions.

- (1) Beginning January 1, 2018, an application to certify credits must be submitted through the State of Texas Environmental Reporting System (STEERS) unless the applicant receives prior approval from the executive director for an alternative means of application submission.
- (2) As a condition for the certification of a credit, the executive director may specify monitoring, testing, recordkeeping, or other requirements through an Emissions Banking and Trading Certification of Emission Reductions Form (Form EBT-CERT), or other forms considered equivalent by the executive director.
- (3) The generator must comply with all conditions specified in a Form EBT-CERT, or other forms considered equivalent by the executive director, once the credit is certified.
- (h) [(f)] Geographic scope. Except as provided in §101.305 of this title (relating to Emission Reductions Achieved Outside the United States), only emission reductions generated in nonattainment areas can be certified. An emission credit must be used in the nonattainment area in which it is generated unless the user has obtained prior written approval of the executive director and the EPA; and

- (1) a demonstration has been made and approved by the executive director and the EPA to show that the emission reductions achieved in another county or state provide an improvement to the air quality in the county of use; or
- (2) the emission credit was generated in a nonattainment area that has an equal or higher nonattainment classification than the nonattainment area of use, and a demonstration has been made and approved by the executive director and the EPA to show that the emissions from the nonattainment area where the emission credit is generated contribute to a violation of the national ambient air quality standard in the nonattainment area of use.
- (i) [(g)] Recordkeeping. The generator shall maintain a copy of all notices and backup information submitted to the executive director and all records required or necessary to verify the certified emissions reduction for a minimum of five years. The user shall maintain a copy of all notices and backup information submitted to the executive director from the beginning of the use period and for at least five years after. The user shall make the records available upon request to representatives of the executive director, EPA, and any local enforcement agency. The records must include, but not necessarily be limited to:
- (1) the name, emission point number, and facility identification number of each facility or any other identifying number for each mobile source using emission credits;

- (2) the amount of emission credits being used by each facility or mobile source; and
- (3) the certificate number of emission credits used for each facility or mobile source.
- (j) [(h)] Public information. All information submitted with notices, reports, and trades regarding the nature, quantity, and sales price of emissions associated with the use, generation, and transfer of an emission credit is public information and may not be submitted as confidential. Any claim of confidentiality for this type of information, or failure to submit all information, may result in the rejection of the emission credit application. All nonconfidential information will be made available to the public as soon as practicable.
- (k) [(i)] Authorization to emit. An emission credit created under this division is a limited authorization to emit the pollutants identified in subsection (a) of this section, unless otherwise defined, in accordance with the provisions of this section, 42 United States Code, §§7401 *et seq.*, and Texas Health and Safety Code, Chapter 382, as well as regulations promulgated thereunder. An emission credit does not constitute a property right. Nothing in this division may be construed to limit the authority of the commission or the EPA to terminate or limit such authorization.

(<u>l)</u> [(j)] Program participation. The executive director has the authority to prohibit a person from participating in emission credit trading either as a generator or user, if the executive director determines that the person has violated the requirements of the program or abused the privileges provided by the program.

(m) [(k)] Compliance burden. A user may not transfer their compliance burden and legal responsibilities to a third-party participant. A third-party participant may only act in an advisory capacity to the user.

(n) [(l)] Credit ownership. The owner of the initial emission credit shall be the owner or operator of the facility or mobile source creating the emission reduction. The executive director may approve a deviation from this subsection considering factors such as, but not limited to:

- (1) whether an entity other than the owner or operator of the facility or mobile source incurred the cost of the emission reduction strategy; or
- (2) whether the owner or operator of the facility or mobile source lacks the potential to generate 0.1 [1/10] ton per year of credit after all adjustments are applied.

§101.303. Emission Reduction Credit Generation and Certification.

- (a) Emission reduction strategy.
- (1) An emission reduction credit (ERC) may be generated using one of the following strategies or any other method that is approved by the executive director:
- (A) the permanent shutdown of a facility that causes a loss of capability to produce emissions;
- (B) the installation and operation of pollution control equipment that reduces emissions below baseline emissions for the facility;
- (C) a change in a manufacturing process that reduces emissions below baseline emissions for the facility;
- (D) a permanent curtailment in production that reduces the facility's capability to produce emissions; or
- (E) pollution prevention projects that produce surplus emission reductions.
 - (2) An ERC may not be generated from the following strategies:

- (A) reductions from the shifting of activity from one facility to another facility at the same site;
- (B) that portion of reductions funded through state or federal programs, unless specifically allowed under that program; [or]
- (C) reductions from a facility without state implementation plan (SIP) emissions; or [.]

(D) reductions from the shutdown of specific types of inelastic area sources that are driven by population needs. The executive director shall maintain a public list of area source categories determined to be inelastic categories.

(i) The list of inelastic area source categories will be made available to the public on the commission's website.

(ii) Any person may submit a written petition requesting that the executive director add or remove a category from the list.

(iii) Within 60 days of receiving a petition under clause (ii) of this subparagraph, the executive director shall prepare a draft revised list or propose denial of the petition by preparing a draft denial statement supporting denial of the petition.

(iv) The executive director may on its own motion propose revisions to the list by preparing a draft revised list.

(v) The executive director's draft revised list, or draft denial statement, under clauses (iii) and (iv) of this subparagraph shall be made available for public comment for 30 days.

(vi) Within 30 days of the public comment period ending, the executive director shall issue a proposed final list or a proposed final denial statement for consideration and approval by the commission.

(vii) The commission shall approve, modify, or deny the proposed revisions to the list of inelastic area sources categories made by the executive director under clauses (iii) and (iv) of this subparagraph.

(viii) The commission shall approve, modify, or remand to the executive director for further consideration a recommendation to deny a petition submitted by the executive director under clause (iii) of this subparagraph.

(ix) The shutdown of an area source category that falls into one of the categories on the list under clause (i) of this subparagraph is ineligible for emissions reduction credit generation.

- (b) ERC baseline emissions.
 - (1) The baseline emissions may not exceed the facility's SIP emissions.
- (2) The activity and emission rate used to calculate the facility's historical adjusted emissions must be determined from the same two consecutive calendar years [selected from the ten consecutive years immediately before the emission reduction is achieved].
- (A) For point sources, the historical adjusted emissions must be based on two consecutive calendar years from the ten consecutive years immediately before the emissions reduction is achieved.
- (B) For area sources, the historical adjusted emissions must be based on two consecutive years from the five consecutive years immediately before the emissions reduction is achieved unless detailed operational records are available for more than five years. The historical adjusted emissions may be determined from two consecutive calendar years up to six to ten consecutive years immediately before the emissions reduction is achieved when detailed operational records are available for those years.

Page 152

(3) For a facility in existence less than 24 months or not having two

complete calendar years of activity data, a shorter period of not less than 12 months

may be considered by the executive director.

(c) ERC calculation.

(1) The quantity of ERCs is determined by subtracting the facility's

strategic emissions from the facility's baseline emissions, as calculated in the following

equation.

Figure: 30 TAC §101.303(c)(1)

[Figure: 30 TAC §101.303(c)]

ERC = BE - SE

Where:

ERC = The amount of emission reduction credits generated, in tenths of a ton per year.

BE = The facility's baseline emissions, which is the lowest of the historical adjusted

emissions or the state implementation plan emissions.

SE = The facility's strategic emissions, which is the enforceable emission limit for the

facility after implementation of the emission reduction strategy.

(2) For area sources generating credits from the permanent shutdown of

a facility, the amount of ERCs calculated will be reduced by 15% or 0.1 ton per year,

whichever is greater.

(3) For an area source facility sources, the amount of ERCs calculated will be adjusted to account for the quality of the data used to quantify the emissions. The adjustment will be:

(A) no reduction for the same type of records that are required to be maintained for a point source facility operating as a point source; or

(B) 15% or 0.1 ton per year, whichever is greater, reduction for records supporting alternative methods approved according to §101.302(e)(1)(E) of this title (relating to General Provisions).

(4) If the facility is subject to both of the adjustments in paragraphs (2) and (3) (1) and (2) of this subsection, the total combined adjustment to the amount of ERCs issued will be a reduction of 20% or 0.1 ton per year, whichever is greater.

(d) ERC certification.

(1) The owner or operator of a facility with potential ERCs shall submit <u>an</u> <u>application form specified by the executive director and signed by an authorized</u> <u>account representative as specified in subparagraphs (A) - (D) of this paragraph</u> [to the executive director an application for ERCs no more than two years after the implementation of the emission reduction strategy].

(A) Applications will be reviewed to determine the credibility of the reductions. Reductions determined to be creditable will be certified by the executive director and an ERC will be issued to the owner.

(B) The application for ERCs must be submitted no more than two years after the facility's emissions reduction date, except as provided by subparagraphs (C) and (D) of this paragraph.

(C) The application for ERCs from all facilities affected by a complete site shutdown of an oil and gas production site may be submitted no more than two years after the site's production well is plugged in accordance with requirements of the Railroad Commission of Texas if the plugging is completed within one year of final production being reported to the Railroad Commission of Texas.

Emission credits certified under this exception will be available for use for 72 months from the date well plugging is completed in lieu of the provisions outlined in §101.309(b)(2) of this title (relating to Emission Credit Banking and Trading).

(D) For an area source facility, the application for ERCs may be submitted as follows.

(i) For emission reductions that occurred after June 1, 2013 and prior to January 1, 2015, the application for ERCs must be submitted by December 31, 2017.

(ii) For emissions reductions that occurred between January 1, 2015 and January 1, 2017, the application for ERCs may be submitted up to three years after the facility's emissions reduction date.

(iii) The application deadline exceptions specified in clauses
(i) and (ii) of this subparagraph no longer apply after December 31, 2019.

(iv) Emission credits certified under the application deadline exceptions specified in clauses (i) and (ii) of this subparagraph or certified for area source emission reductions occurring before and included on an application submitted, but not acted on, before January 1, 2017 shall be available for use for 72 months from the date of the emission reduction in lieu of the provisions outlined in §101.309(b)(2) of this title.

- (2) ERCs must be quantified in accordance with §101.302(e) [§101.302(d)] of this title [(relating to General Provisions)]. The executive director shall have the authority to inspect and request information to assure that the emissions reductions have actually been achieved.
- (3) An application for ERCs must include, but is not limited to, a completed application form specified by the executive director signed by an

authorized representative of the applicant along with the following information for each pollutant reduced at each applicable facility:

- (A) a complete description of the emission reduction strategy;
- (B) the amount of ERCs generated;
- (C) for volatile organic compound reductions, a list of the specific compounds reduced;
- (D) documentation supporting the activity, emission rate, historical adjusted emissions, SIP emissions, baseline emissions, and strategic emissions;
- (E) <u>for point sources</u>, emissions inventory data for [each of] the years used to determine the SIP emissions and historical adjusted emissions;
- (F) the most stringent emission rate and the most stringent emission level, considering all applicable local, state, and federal requirements;
- (G) a complete description of the protocol used to calculate the emission reduction generated; and

- (H) the actual calculations performed by the generator to determine the amount of ERCs generated.
 - (4) ERCs will be made enforceable by one of the following methods:
- (A) amending or altering a new source review permit to reflect the emission reduction and set a new maximum allowable emission limit;
- (B) voiding a new source review permit when a facility has been shut down; or
- (C) for any facility without a new source review permit that is otherwise authorized by commission rule, certifying the emission reduction and the new maximum emission limit on one or more forms specified by the executive director, including a Certification of Emission Limits (Form APD-CERT) submitted through e-permitting and an Emissions Banking and Trading Certification of Emission Reductions Form (Form EBT-CERT), or other forms [form] considered equivalent by the executive director [or an agreed order].
- §101.304. Mobile Emission Reduction Credit Generation and Certification.
 - (a) Methods of generation.

- (1) Mobile emission reduction credits (MERC) may be generated by any mobile source emission reduction strategy that creates actual mobile source emission reductions under these rules and subject to the approval of the <u>executive director</u> [commission].
 - (2) MERCs may not be generated from the following strategies:
- (A) that portion of reductions funded through a state or federal program, unless specifically allowed under that program;
- (B) through the transfer of emissions from one mobile source to another mobile source within the same nonattainment area and under common ownership or control; [or]
- (C) reduction strategies resulting in secondary emissions increases that exceed limits established under state or federal rules or regulations; or [.]
- (D) the shutdown or replacement of a mobile source unless that source is rendered permanently inoperable or permanently removed from North America.
 - (b) MERC baseline emissions.

- (1) Mobile source baseline emissions shall be calculated with either measured emissions of an appropriately sized sample of the participating mobile sources using a United States Environmental Protection Agency (EPA)-approved test procedure, or by estimating emissions of the participating mobile sources using the most recent edition of the EPA on-road or non-road mobile emissions factor models or other model as applicable.
- (2) The historical adjusted emissions and state implementation plan emissions may only include actual emissions that occurred when the mobile source was operating inside a specific nonattainment area. [Mobile source baseline emissions for each year of the proposed mobile source reduction strategy must be the same as, or lower than, those used or proposed to be used in the state implementation plan (SIP) in which the reduction strategy is proposed.]
- (3) The activity and emissions rate data used to calculate the mobile source's historical adjusted emissions must be determined from two consecutive calendar years from the five consecutive years immediately before the emissions reduction is achieved unless detailed operational records are available for more than five years. If these detailed operational records are available and do not demonstrate decreasing use due to vehicle age or inoperability, the historical adjusted emissions for a mobile source may be determined from two consecutive calendar years up to six to ten consecutive years immediately before the emissions reduction is achieved.

- (4) For a mobile source in existence less than 24 months or not having two complete calendar years of activity data, a shorter period of not less than 12 months may be approved by the executive director.
- (5) [(3)] Baseline emissions for quantifying MERCs should include, but not be limited to, the following information and data as appropriate:
- (A) the emission standard to which the mobile source is subject or the emission performance standard to which the mobile source is certified;
- (B) the estimated or measured in-use emissions levels per unit of use from all significant mobile source emissions sources;
 - (C) the number of mobile sources in the participating group;
 - (D) the type or types of mobile sources by model year;
- (E) the actual or projected activity level, hours of operation, or miles traveled, by type and model year; and
- (F) the projected remaining useful life of the participating group of mobile sources.

- (c) MERC calculation. The quantity of MERCs must be calculated from the [annual] difference between the mobile source baseline emissions and the <u>strategic</u> [projected] emissions [level after the MERC strategy has been put in place]. The <u>strategic</u> [projected] emissions must be based on the best estimate of the actual in-use emissions of the modified or substitute on-road or non-road vehicles or transportation system <u>that will occur when the mobile source is operating inside a specific nonattainment area</u>. Any estimate of a <u>strategic</u> [projected annual mobile source] emissions level based on an assumption of reduced consumer service or transportation service would not be allowed without the support of a convincing analytical justification of the assumption.
- (1) For mobile sources generating credits from a shutdown, the amount of MERCs generated will be reduced by 15% or 0.1 ton per year, whichever is greater.
- (2) The amount of MERCs generated will be adjusted to account for the quality of the data used to quantify the emissions. The reduction will be 15% or 0.1 ton per year, whichever is greater, for records supporting alternative methods approved according to §101.302(e)(1)(E) of this title (relating to General Provisions).
- (3) If the mobile source is subject to an adjustment based on both the reduction strategy being a shutdown and the quality of the data used to quantify the

emissions, the total combined reduction to the amount of MERCs generated will be 20% or 0.1 ton per year, whichever is greater.

(d) Emission offsets. Mobile source reduction strategies that reduce emissions in one criteria pollutant or precursor for which an area is designated nonattainment, yet result in an emissions increase of another criteria pollutant or precursor for which that same area is nonattainment and from the same mobile source, must be required to offset the resulting increase at a 1:1 ratio with ERCs or MERCs.

(e) MERC certification.

(1) The generator of the reduction from a mobile source with potential MERCs shall submit an application form specified by the executive director and signed by an authorized account representative [Mobile sources with potential MERCs shall submit to the executive director an MEC-1 Form, Application for Mobile Emission Credits, within 180 days of implementation of the strategy. Upon approval of the application, the executive director shall issue a MERC certificate(s) to the person, company, business, organization, or public entity generating the mobile emission reduction. A MERC certificate will indicate the total amount of certified emission credits, the quantity available on an annual basis, and the date upon which the last annualized emission reduction expires].

(A) Applications will be reviewed to determine the credibility of the reductions. Reductions determined to be creditable will be certified by the executive director and a MERC will be issued to the owner of the mobile source except as specified in §101.302(n) of this title.

(B) The application for MERCs must be submitted no more than two years after the date of the emissions reduction, except as provided by subparagraph (C) of this paragraph.

(C) For a mobile source, the application for MERCs may be submitted as follows.

(i) For emission reductions that occurred after June 1, 2013 and prior to January 1, 2015, the application for MERCs must be submitted by December 31, 2017.

(ii) For emissions reductions that occurred between January 1, 2015 and January 1, 2017, the application for MERCs may be submitted up to three years after the date of the emissions reduction.

(iii) The application deadline exceptions specified in clauses
(i) and (ii) of this subparagraph no longer apply after December 31, 2019.

(iv) Emission credits certified under the application deadline exceptions specified in clauses (i) and (ii) of this subparagraph or certified for mobile source emission reductions occurring before and included on an application submitted, but not acted on, before January 1, 2017 shall be available for use for 72 months from the date of the emission reduction in lieu of the provisions outlined in §101.309(b)(2) of this title (relating to Emission Credit Banking and Trading).

- (2) MERCs will be determined and certified in accordance with §101.302(e) [§101.302(d)] of this title (relating to General Provisions) using:
 - (A) EPA methodologies, when available;
 - (B) actual monitoring results, when available;
- (C) calculations using the most current EPA mobile emissions factor model or other model as applicable; or
- (D) calculations using creditable emission reduction measurement or estimation methodologies that satisfactorily address the analytical uncertainties of mobile source emissions reduction strategies.
- (3) The expected remaining useful life of the mobile source shall be determined based on the assumptions used in the models in the applicable state

implementation plan (SIP) revision or on a case-by-case basis approved by the executive director when a type of mobile source is not reflected in these models. Except as provided in paragraph (4) of this subsection, the amount of MERCs certified for a given emissions reduction will be determined by the emissions reduction for the expected remaining useful life of the mobile source(s), annualized over 25 years.

(4) The requirement to consider the expected remaining useful life of the mobile source and to annualize the emissions reduction over 25 years, as described in paragraph (3) of this subsection, does not apply if a capture and control system is used to reduce mobile source emissions. Instead, the MERC calculation will include the following.

(A) The strategic emissions used in the MERC calculation must include the mobile source emissions that are not captured by the capture and control system. In addition, the strategic emissions must also include any emissions that are not controlled by the system after capture and any emissions caused by or as a result of operating the system.

(B) The initial owner of the MERCs is the owner or operator of the capture and control system.

(5) [(3)] An application for MERCs must include, but is not limited to, a form specified by the executive director that is [completed MEC-1 Form] signed by an

authorized <u>account</u> representative, [of the applicant] along with the following information for each pollutant reduced by each applicable mobile source:

- (A) the date of the reduction;
- (B) a complete description of the generation strategy;
- (C) the amount of emission credits generated;
- (D) documentation supporting the mobile source baseline activity, mobile source baseline emission rate, <u>historical adjusted emissions</u>, <u>SIP emissions</u>, mobile source baseline emissions, and the mobile source strategy emissions;
- (E) a complete description of the protocol used to calculate the emission reduction generated;
- (F) the actual calculations performed by the generator to determine the amount of emission credits generated; and
- (G) a demonstration that the reductions are surplus to all local, state, and federal rules and to emission modeled in the SIP.

(6) [(4)] MERCs will be made enforceable with an Emissions Banking and Trading Certification Form (Form EBT-CERT), or equivalent form approved by the executive director, that may contain special conditions including, but not limited to: [by obtaining an agreed order that sets a new maximum allowable mobile source emission limit.]

(A) written certification and photographs for mobile sources that are made permanently inoperable for replacement or shutdown;

(B) where applicable, a certified or duplicate Texas Nonrepairable

Vehicle Title for mobile sources that are made permanently inoperable for replacement

or shutdown;

(C) a bill of sale and bill of lading for mobile sources that are permanently removed from North America for replacement or shutdown and any additional information required by the executive director; and

(D) a new maximum allowable mobile source emission limit.

§101.306. Emission Credit Use.

- (a) Uses for emission credits. Unless precluded by a commission order or a condition or conditions within an authorization under the same commission account number, emission credits may be used as the following:
- (1) offsets for a new source, as defined in §101.1 of this title (relating to Definitions), or major modification to an existing source;
- (2) mitigation offsets for action by federal agencies under 40 Code of Federal Regulations Part 93, Subpart B, Determining Conformity of General Federal Actions to State or Federal Implementation Plans;
- (3) an alternative means of compliance with volatile organic compound and nitrogen oxides reduction requirements to the extent allowed in Chapters 115 and 117 of this title (relating to Control of Air Pollution from Volatile Organic Compounds; and Control of Air Pollution from Nitrogen Compounds);
- (4) reductions certified as emission credits may be used in netting by the original applicant, if not used, sold, reserved for use, or otherwise relied upon, as provided by Chapter 116, Subchapter B of this title (relating to New Source Review Permits); or
- (5) compliance with other requirements as allowed in any applicable local, state, and federal requirement.

(b) Credit use calculation.

(1) The number of emission credits needed by the user for offsets shall

be determined as provided by Chapter 116, Subchapter B of this title.

(2) For emission credits used in compliance with Chapter 115 or 117 of

this title, the number of emission credits needed should be determined according to

the following equation plus an additional 10% to be retired as an environmental

contribution.

Figure: 30 TAC §101.306(b)(2) (No change to the figure as it currently exists in TAC.)

(3) For emission credits used to comply with §§117.123, 117.320,

117.323, 117.423, 117.1020, or 117.1220 of this title (relating to Source Cap; and

System Cap), the number of emission credits needed for increasing the 30-day rolling

average emission cap or maximum daily cap should be determined according to the

following equation plus an additional 10% to be retired as an environmental

contribution.

Figure: 30 TAC §101.306(b)(3) (No change to the figure as it currently exists in TAC.)

- (4) Emission credits used for compliance with any other applicable program should be determined in accordance with the requirements of that program and must contain at least 10% extra to be retired as an environmental contribution, unless otherwise specified by that program.
 - (c) Notice of intent to use emission credits.
- (1) [Application to use ERCs.] The executive director will not accept an application to use emission credits [ERCs] before the emission credit [ERC] is available in the compliance account for the site where it will be used. If the emission credit [ERC] will be used for offsets, the executive director will not accept the emission credit [ERC] application before the applicable permit application is administratively complete.
- (A) The user shall submit a completed application at least 90 days before the start of operation for an emission credit [ERC] used as offsets in a permit in accordance with Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification).
- (B) The user shall submit a completed application at least 90 days before the planned use of an emission credit [ERC] for compliance with the requirements of Chapter 115 or 117 of this title or other programs.

(C) If the executive director approves the <u>emission credit</u> [ERC] use, the date the application is submitted will be considered the date the <u>emission credit</u> [ERC] is used.

[(2) Application to use mobile emission reduction credits (MERCs).]

[(A) For MERCs which are to be used as offsets in a New Source Review permit in accordance with Chapter 116 of this title, the MERCs must be identified prior to permit issuance. Prior to construction, the offsets must be provided through submittal of a completed application form specified by the executive director.]

[(B) For emission credits that are to be used for compliance with the requirements of Chapter 115 or 117 of this title or other programs, the user must submit a completed application at least 90 days prior to the planned use of the MERC. MERCs may be used only after the executive director grants approval of the notice of intent to use. The user must also keep a copy of the notice and all backup in accordance with §101.302(g) of this title (relating to General Provisions).]

(2) [(3)] If the executive director denies the facility or mobile source's use of emission credits, any affected person may file a motion for reconsideration within 60 days of the denial. Notwithstanding the applicability provisions of §50.31(c)(7) of this title (relating to Purpose and Applicability), the requirements of §50.39 of this title

(relating to Motion for Reconsideration) shall apply. Only an affected person may file a motion for reconsideration.

(d) Inter-pollutant use of <u>emission credits</u> [ERCs]. With prior approval from the executive director and the United States Environmental Protection Agency, a nitrogen oxides or volatile organic compound <u>emissions credit</u> [ERC] may be used to meet the offset requirements for the other ozone precursor if photochemical modeling demonstrates that the overall air quality and the regulatory design value in the nonattainment area of use will not be adversely affected by the substitution.

SUBCHAPER H: EMISSIONS BANKING AND TRADING DIVISION 4: DISCRETE EMISSION CREDIT PROGRAM §§101.370, 101.372 – 101.374, 101.376

Statutory Authority

The amended sections are adopted under Texas Water Code (TWC), §5.102, concerning General Powers, TWC, §5.103, concerning Rules, and TWC, §5.105, concerning General Policy, that authorize the commission to adopt rules necessary to carry out its powers and duties under the TWC; and under Texas Health and Safety Code (THSC), §382.017, concerning Rules, that authorizes the commission to adopt rules consistent with the policy and purposes of the Texas Clean Air Act. The rulemaking is adopted under THSC, §382.002, concerning Policy and Purpose, that establishes the commission's purpose to safeguard the state air resources, consistent with the protection of public health, general welfare, and physical property; THSC, §382.011, concerning General Powers and Duties, that authorizes the commission to control the quality of the state's air; THSC, §382.012, concerning State Air Control Plan, that authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; THSC, §382.014, concerning Emission Inventory, that authorizes the commission to require a person whose activities cause air contaminant emissions to submit information to enable the commission to develop an emissions inventory; THSC, §382.016, concerning Monitoring Requirements; Examination of Records, that authorizes the commission to prescribe requirements for owners or operators of sources to make and maintain records of emissions measurements; and THSC,

§382.021, concerning Sampling Methods and Procedures, that authorizes the commission to prescribe the sampling methods and procedures to determine compliance with its rules. The amended sections are also adopted under THSC, §382.023, concerning Orders, and §382.036, concerning Cooperation and Assistance. The rulemaking is also adopted under Federal Clean Air Act, 42 United States Code, §§7401, et seq., which requires states to submit SIP revisions that specify the manner in which the national ambient air quality standard will be achieved and maintained within each air quality control region of the state.

The adopted amendments implement THSC, §§382.002, 382.011, 382.012, 382.014, 382.016, 82.017. 382.021, 382.023, and 382.036.

§101.370. Definitions.

Unless specifically defined in the Texas Clean Air Act or in §3.2 or §101.1 of this title (relating to Definitions), the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition, the following words and terms, when used in this division, have the following meanings, unless the context clearly indicates otherwise.

(1) Activity--The amount of activity at a facility or mobile source measured in terms of production, use, raw materials input, vehicle miles traveled, or other similar units that have a direct correlation with the economic output and emission rate of the facility or mobile source.

- (2) Actual emissions--The total emissions during a selected time period, using the facility's or mobile source's actual daily operating hours, production rates, or types of materials processed, stored, or combusted during that selected time period.
- (3) Area source--Any facility included in the agency emissions inventory under the area source category.
- (4) Baseline emissions--The facility's emissions, in tons per year, [occurring] before implementation of an emission reduction [strategy] and calculated as the lowest of the facility's historical adjusted emissions or state implementation plan (SIP) emissions, except that the SIP emissions value is only considered for a facility in a nonattainment area.
- (5) Certified--Any emission reduction that is determined to be creditable upon review and approval by the executive director.
- (6) Curtailment--A reduction in activity level at any facility or mobile source.

- (7) Discrete emission credit--A discrete emission reduction credit or mobile discrete emission reduction credit.
- (8) Discrete emission reduction credit--A certified emission reduction that is created by reducing emissions from a facility during a generation period, quantified after the generation period, and expressed in tenths of a ton.
 - (9) Emission rate--The facility's rate of emissions per unit of activity.
- (10) Emission reduction-- \underline{A} [An actual] reduction in <u>actual</u> emissions from a facility or mobile source.
- (11) Emission reduction strategy--The method implemented to reduce the facility's or mobile source's emissions beyond that required by state or federal law, regulation, or agreed order.
- (12) Facility--As defined in §116.10 of this title (relating to General Definitions).
- (13) Generation period--The discrete period of time, not exceeding 12 months, over which a discrete emission [reduction] credit is created.

Page 177

(14) Generator--The owner or operator of a facility or mobile source that creates an emission reduction.

(15) Historical adjusted emissions--The [facility's] emissions occurring before implementation of an emission reduction strategy and adjusted for any local, state, or federal requirement, calculated using the following equation.

Figure: 30 TAC §101.370(15)

[Figure: 30 TAC §101.370(15)]

$$E_H = \frac{(A_1 \times ER_1) + (A_2 \times ER_2)}{2}$$

Where:

 $E_{\rm H}$ = The historical adjusted emissions for a facility.

 A_1 = The [facility's] activity during the first of any two consecutive calendar years selected in accordance with §101.373(b)(2) or §101.374(b)(3) of this title (relating to Discrete Emission Reduction Credit Generation and Certification; or Mobile Discrete Emission Reduction Credit Generation and Certification), not to exceed any applicable local, state, or federal requirement.

 ER_1 = The [facility's] emission rate during the first of any two consecutive calendar years selected in accordance with §101.373(b)(2) or §101.374(b)(3) of this title, not to exceed any applicable local, state, or federal requirement.

 A_2 = The [facility's] activity during the second of any two consecutive calendar years selected in accordance with §101.373(b)(2) or §101.374(b)(3) of this title, not to exceed any applicable local, state, or federal requirement.

 ER_2 = The [facility's] emission rate during the second of any two consecutive calendar years selected in accordance with §101.373(b)(2) or §101.374(b)(3) of this title, not to

exceed any applicable local, state, or federal requirement.

- (16) Mobile discrete emission reduction credit--A certified emission reduction from a mobile source <u>or group of mobile sources</u> that is created during a generation period, quantified after the period in which emissions reductions are made, and expressed in <u>tenths of a ton</u> [tons].
- (17) Mobile source--A source included in the agency's emissions inventory under the mobile source category [On-road (highway) vehicles (e.g., automobiles, trucks, and motorcycles) and non-road vehicles (e.g., trains, airplanes, agricultural equipment, industrial equipment, construction vehicles, off-road motorcycles, and marine vessels)].
- (18) Mobile source baseline activity--The level of activity of a mobile source during the applicable mobile source baseline emissions period.
- (19) Mobile source baseline emissions--The mobile source's actual emissions, in tons per year, occurring prior to a mobile emission reduction strategy calculated as the <u>lowest of the historical adjusted emissions or state implementation</u> <u>plan emissions</u> [product of mobile source baseline activity and mobile source baseline emission rate not to exceed all limitations required by applicable local, state, and federal rules and regulations].

- (20) Mobile source baseline emissions rate--The mobile source's rate of emissions per unit of mobile source baseline activity during the mobile source baseline emissions period.
- (21) Ozone season--The portion of the year when ozone monitoring is federally required to occur in a specific geographic area, as defined in 40 Code of Federal Regulations Part 58, Appendix D, §2.5.
- (22) Point source--A facility included in the agency's emissions inventory under the point source category.
- (23) Primarily operated--When the activity is at least 75% 85% within a specific nonattainment area.
- (24) Projection-base year--The year of the emissions inventory used to project or forecast future-year emissions for modeling point sources in a state implementation plan revision.
- (25) [(22)] Protocol--A replicable and workable method of estimating emission rates or activity levels used to calculate the amount of emission reduction generated or credits required for facilities or mobile sources.

(26) [(23)] Quantifiable--An emission reduction that can be measured or estimated with confidence using replicable methodology.

(27) [(24)] Real reduction--A reduction in which actual emissions are reduced. Emissions reductions that result from any of the following are not considered a real reduction:

(A) lowering the allowable emission limit in a permit without a physical change or change in method of operation;

(B) shifting a vent gas stream or other pollution or waste stream to another site;

(C) a mobile source that is not capable of being operated as intended; or

(D) a change in an emissions factor or emissions calculation equation.

(28) [(25)] Shutdown--The cessation of an activity producing emissions at a facility or mobile source.

(29) [(26)] Site--As defined in §122.10 of this title (relating to General Definitions).

(30) [(27)] State implementation plan--A plan that provides for attainment and maintenance of a primary or secondary national ambient air quality standard as adopted in 40 Code of Federal Regulations Part 52, Subpart SS.

(31) State implementation plan (SIP) emissions--SIP emissions are determined as follows.

(A) For point sources, SIP emissions are facility-specific values based on the emissions data in the state's annual emissions inventory (EI) for the year used to develop the projection-base year inventory for the modeling included in an attainment demonstration (AD) SIP revision, used for the attainment inventory for a maintenance plan SIP revision, or used in an EI SIP revision, as applicable under subparagraph (B)(i) - (iii) (iv) of this paragraph. For area and mobile sources, SIP emissions are calculated values based on actual operations during the latest triennial National Emissions Inventory (NEI) year used to develop the modeling included in an AD SIP revision, used for the attainment inventory for a maintenance plan SIP revision, or used in an EI SIP revision, as applicable under subparagraph (B)(i) - (iii) (iv) of this paragraph. For point, area, and mobile sources located in a nonattainment area without an applicable SIP as determined under subparagraph (B)(i) - (iii) of this paragraph, SIP emissions are based on the year of the most recent NEI submitted to the United States

Environmental Protection Agency (EPA) preceding that area's nonattainment designation for the current National Ambient Air Quality Standard (NAAQS).

(B) The applicable SIP revision must be for the nonattainment area where the facility is located, or for mobile sources where the mobile source is primarily operated, and must be for the criteria pollutant, or include the precursor pollutant, for which the applicant is requesting credits. The applicable SIP revision is:

(i) an AD SIP revision or a maintenance plan SIP revision,
whichever was most recently submitted to the United States Environmental Protection
Agency (EPA) for the current National Ambient Air Quality Standard (NAAQS);

(ii) if the SIP revisions identified in clause (i) of this subparagraph have not been submitted to the EPA, an AD SIP revision or a maintenance plan SIP revision, whichever was most recently submitted to the EPA for an earlier NAAOS issued in the same averaging time and the same form as the current NAAOS; or

(iii) if the SIP revisions identified in clauses (i) and (ii) of this subparagraph have not been submitted to the EPA, the most recent EI SIP revision submitted to the EPA; or

(iv) if the SIP revisions identified in clauses (i) - (iii) of this subparagraph have not been submitted to the EPA, the EI SIP revision that will be submitted to the EPA.

(C) The total amount of SIP emissions available for credit generation will be set for area, non-road mobile, and on-road mobile source categories.

(i) Total creditable area source emissions are 75% of the total area source emissions excluding residential area sources in the applicable SIP revision.

(ii) Total creditable non-road mobile source emissions are 75% of the total non-road mobile source emissions in the applicable SIP revision.

(iii) Total creditable on-road mobile source emissions are 85% of the total on-road mobile source emissions in the applicable SIP revision.

(D) The SIP emissions for a facility or mobile source may not exceed any applicable local, state, or federal requirement.

(E) The year used to determine SIP emissions is as specified in subparagraph (A) of this paragraph, unless a different year is specifically identified

otherwise by the commission in the most recent SIP revision adopted after December 31, 2017.

[(28) State implementation plan (SIP) emissions--The emissions data in the state's emissions inventory (EI) required under 40 Code of Federal Regulations Part 51, Subpart A for the year used to represent the facility's emissions in a SIP revision. The applicable SIP revision must be for the nonattainment area where the facility is located and must be for the criteria pollutant, or include the precursor pollutant, for which the applicant is requesting credits. The SIP emissions may not exceed any applicable local, state, or federal requirement. A facility's SIP emissions are determined from the EI year that:]

[(A) was used to develop the projection-base year inventory for the modeling included in an attainment demonstration (AD) SIP revision or the attainment inventory for a maintenance plan SIP revision, whichever was most recently submitted to the United States Environmental Protection Agency (EPA) for the current National Ambient Air Quality Standard (NAAQS);]

[(B) if the SIP revisions identified in subparagraph (A) of this paragraph have not been submitted to the EPA, was used to develop the projection-base year inventory for the modeling included in an AD SIP revision or the attainment inventory for a maintenance plan SIP revision, whichever was most recently submitted

to the EPA for an earlier NAAQS issued in the same averaging time and the same form as the current NAAQS;]

[(C) if the SIP revisions identified in subparagraphs (A) and (B) of this paragraph have not been submitted to the EPA, corresponds to the EI for the most recent EI SIP revision submitted to the EPA; or]

[(D) if the SIP revisions identified in subparagraphs (A) - (C) of this paragraph have not been submitted to the EPA, corresponds to the EI that will be used for the EI SIP revision that will be submitted to the EPA.]

(32) [(29)] Strategy activity--The facility's or mobile source's level of activity during the discrete emission reduction credit generation period.

(33) [(30)] Strategy emission rate--The facility's or mobile source's emission rate during the discrete emission reduction credit generation period.

(34) [(31)] Surplus--An emission reduction that is not otherwise required of a facility or mobile source by any applicable local, state, or federal requirement and has not been otherwise relied upon in the state implementation plan.

(35) [(32)] Use period--The period of time over which the user applies discrete emission credits to an applicable emission reduction requirement.

(36) [(33)] User--The owner or operator of a facility or mobile source that acquires and uses discrete emission reduction credits to meet a regulatory requirement, demonstrate compliance, or offset an emission increase.

(37) [(34)] Use strategy--The compliance requirement for which discrete emission credits are being used.

§101.372. General Provisions.

- (a) Applicable pollutants.
- (1) A discrete emission [reduction] credit [(DERC)] may be generated from a reduction of a criteria pollutant, excluding lead, or a precursor of a criteria pollutant.
- (2) A <u>discrete emission credit</u> [DERC] generated from the reduction of one pollutant or precursor may not be used to meet the requirements for another pollutant or precursor, except as provided in §101.376 of this title (relating to Discrete Emission Reduction Credit Use).
- [(2) Reductions of volatile organic compounds (VOC), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂) and particulate matter with an aerodynamic diameter of less than or equal to a nominal ten microns (PM_{10}) may

qualify as mobile discrete emission reduction credits (MDERCs) as appropriate.

Reductions of other criteria pollutants are not creditable. Reductions of one pollutant may not be used to meet the reduction requirements for another pollutant, unless urban airshed modeling demonstrates that one may be substituted for another subject to approval by the executive director and the United States Environmental Protection Agency (EPA).]

- (b) Eligible generator categories. Eligible categories include the following:
 - (1) facilities; (including point and area sources);
 - (2) mobile sources; or
- (3) any facility, including area sources, or mobile source associated with actions by federal agencies under 40 Code of Federal Regulations Part 93, Subpart B, Determining Conformity of General Federal Actions to State or Federal Implementation Plans.
- (c) Ineligible generator categories. The following categories are not eligible to generate discrete emission credits:
 - (1) residential area sources;

- (2) facilities or mobile sources that do not have records for approved or approvable methods to quantify emissions;
- (3) on-road mobile sources that are not part of an industrial, commercial, nonprofit, institutional, or municipal/government fleet; and
- (4) mobile sources within a nonattainment area that do not primarily operate within that nonattainment area with the exception of marine and locomotive sources that use capture and control emissions reduction systems.
 - (d) [(c)] Discrete emission credit requirements.
- (1) A discrete emission reduction credit (DERC) DERC is a certified emission reduction that:
- (A) must be real, quantifiable, and surplus at the time the DERC is generated;
- (B) must occur after the year used to determine the state implementation plan (SIP) emissions for a facility in a nonattainment area; and
- (C) must occur at a facility with SIP emissions [reported before implementation of the emission reduction strategy] for a facility in a nonattainment

area. Facilities Individual facilities in a nonattainment area that were not operated during the year of the SIP emissions may not be used to generate DERCs.

- (2) To be creditable as a mobile discrete emission reduction credit an MDERC, an emission reduction must meet the following:
- (A) the reduction must be real, quantifiable, and surplus at the time it is created;
- (B) the reduction must have occurred after the <u>SIP emissions year</u> for a mobile source in a nonattainment area [most recent year of emissions inventory used in the SIP for all applicable pollutants]; <u>and</u>
- (C) <u>for a mobile source in a nonattainment area,</u> the mobile <u>source</u> [source's emissions] must have <u>operated during the SIP emissions year.</u> [been represented in the emissions inventory used for the SIP; and]
- [(D) the mobile sources must have been included in the attainment demonstration baseline emissions inventory. If a mobile reduction implemented is not in the baseline_for emissions, this reduction does not constitute a discrete emission reduction.]

(3) Emission reductions from a facility or mobile source [which are] certified as discrete emission credits under this division cannot be recertified in whole or in part as emission credits under another division within this subchapter.

(e) [(d)] Protocol.

- (1) All generators or users of discrete emission credits must use a protocol which has been submitted by the executive director to the <u>United States</u> <u>Environmental Protection Agency (EPA)</u> [EPA] for approval, if existing for the applicable facility or mobile source, to measure and calculate baseline emissions. If the generator or user wishes to deviate from a protocol submitted by the executive director, EPA approval is required before the protocol can be used. Protocols shall be used as follows.
- (A) The owner or operator of a facility subject to the emission specifications under §§117.110, 117.310, 117.410, 117.1010, 117.1210, 117.1310, 117.2010, 117.2110, or 117.3310 of this title (relating to Emission Specifications for Attainment Demonstration; Emission Specifications for Eight-Hour Attainment Demonstration; and Emission Specifications) shall use the testing and monitoring methodologies required under Chapter 117 of this title (relating to Control of Air Pollution from for Nitrogen Compounds) to show compliance with the emission specification for that pollutant.

(B) The owner or operator of a facility subject to the control requirements or emission specifications under Chapter 115 of this title (relating to Control of Air Pollution from Volatile Organic Compounds) shall use the testing and monitoring methodologies required under Chapter 115 of this title to show compliance with the applicable requirements.

(C) For area sources, except as specified in subparagraphs (A) and (B) of this paragraph, the owner or operator of a facility subject to the requirements under Chapter 106 of this title (relating to Permits by Rule) or a permit issued under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) shall use the testing and monitoring methodologies required under Chapter 106 of this title or a permit issued under Chapter 116 of this title to demonstrate compliance with the applicable requirements.

(D) [(C)] The executive director may approve the use of a methodology approved by the EPA to quantify emissions from the same type of facility.

(E) [(D)] Except as specified in subparagraph (D) [(C)] of this paragraph, if the executive director has not submitted a protocol for the applicable facility or mobile source to the EPA for approval, the following applies:

(i) the amount of discrete emission credits from a facility or mobile source, in tons, will be determined and certified based on quantification methodologies at least as stringent as the methods used to demonstrate compliance with any applicable requirements for the facility or mobile source;

(ii) the generator shall collect relevant data sufficient to characterize the facility's or mobile source's emissions of the affected pollutant and the facility's or mobile source's activity level for all representative phases of operation in order to characterize the facility's or mobile source's baseline emissions;

(iii) the owner or operator of a facility with a continuous emissions monitoring system or predictive emissions monitoring system in place shall use this data in quantifying emissions;

(iv) the chosen quantification protocol must be made available for public comment for a period of 30 days and must be viewable on the commission's website;

(v) the chosen quantification protocol and any comments received during the public comment period must, upon approval by the executive director, be submitted to the EPA for a 45-day adequacy review; and

(vi) quantification protocols may not be accepted for use with this division if the executive director receives a letter objecting to the use of the protocol from the EPA during the 45-day adequacy review or the EPA proposes disapproval of the protocol in the *Federal Register*.

(2) If the monitoring and testing data specified in paragraph (1) of this subsection is missing or unavailable, the generator or user shall determine the facility's emissions for the period of time the data is missing or unavailable using the most conservative method for replacing the data and these listed methods in the following order:

- (A) continuous monitoring data;
- (B) periodic monitoring data;
- (C) testing data;
- (D) manufacturer's data;
- (E) EPA Compilation of Air Pollution Emission Factors (AP-42), September 2000; or
 - (F) material balance.

(3) When quantifying actual emissions in accordance with paragraph (2) of this subsection, the generator or user shall submit the justification for not using the methods in paragraph (1) of this subsection and submit the justification for the method used.

(f) Credit application. Beginning January 1, 2018, a credit application must be submitted through the State of Texas Environmental Reporting System (STEERS) unless the applicant receives prior approval from the executive director for an alternative means of application submission.

(g) [(e)] Credit certification.

(1) The amount of discrete emission credits must be rounded down to the nearest tenth of a ton when generated and must be rounded up to the nearest tenth of a ton when used. A An individual area source-facility, aggregated fugitive emissions, or aggregated mobile sources that cannot generate at least 0.1 ton of credit after all adjustments are applied may not generate discrete emission credits. Fugitive emissions or mobile source emissions aggregated to meet the requirement that emission reductions be certified for at least 0.1 ton must be represented on the same application and will have an application deadline determined by the earliest emission reduction date among the aggregated sources.

- (2) The executive director shall review an application for certification to determine the credibility of the reductions and may certify reductions. Each DERC certified will be assigned a certificate number. Reductions determined to be creditable will be certified by the executive director.
- (3) The applicant will be notified in writing if the executive director denies the discrete emission credit notification. The applicant may submit a revised application in accordance with the requirements of this division.
- (4) If a facility's or mobile source's emissions exceed any applicable local, state, or federal requirement, reductions of emissions exceeding the requirement may not be certified as discrete emission credits.
- (h) [(f)] Geographic scope. Except as provided in paragraph (7) of this subsection and §101.375 of this title (relating to Emission Reductions Achieved Outside the United States), only emission reductions generated in the State of Texas may be creditable and used in the state with the following limitations.
- (1) <u>volatile organic compounds (VOC)</u> [VOC] and <u>nitrogen oxides (NO_x)</u> [NO_x] discrete emission credits generated in an ozone attainment area may be used in any county or portion of a county designated as attainment or unclassified, except as specified in paragraphs (4) and (5) of this subsection and may not be used in an ozone nonattainment area.

- (2) VOC and NO_x discrete emission credits generated in an ozone nonattainment area may be used either in the same ozone nonattainment area in which they were generated, or in any county or portion of a county designated as attainment or unclassified.
- (3) VOC and NO_x discrete emission credits generated in an ozone nonattainment area may not be used in any other ozone nonattainment area, except as provided in this subsection.
- (4) VOC discrete emission credits are prohibited from use within the covered attainment counties, as defined in §115.10 of this title (relating to Definitions), if generated outside of the covered attainment counties. VOC discrete emission credits generated in a nonattainment area may be used in the covered attainment counties, except those generated in El Paso.
- (5) NO_x discrete emission credits are prohibited from use within the covered attainment counties, as defined in §115.10 of this title, if generated outside of the covered attainment counties. NO_x discrete emission credits generated in a nonattainment area, except those generated in El Paso, may be used in the covered attainment counties.

(6) <u>carbon monoxide (CO)</u>, <u>sulfur dioxide (SO₂)</u>, <u>and particulate matter</u> with diameters less than or equal to 10 micrometers (PM₁₀) [CO, SO₂, and PM₁₀] discrete emission credits must be used in the same metropolitan statistical area (as defined in Office of Management and Budget Bulletin Number 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" dated June 30, 1993) in which the reduction was generated.

(7) VOC and NO_x discrete emission credits generated in other counties, states, or emission reductions in other nations may be used in any attainment or nonattainment county provided a demonstration has been made and approved by the executive director and the EPA, to show that the emission reductions achieved in the other county, state, or nation improve the air quality in the county where the credit is being used.

(i) [(g)] Ozone season. In areas having an ozone season of less than 12 months (as defined in 40 Code of Federal Regulations Part 58, Appendix D) VOC and NO_x discrete emission credits generated outside the ozone season may not be used during the ozone season.

(j) [(h)] Recordkeeping. The generator must maintain a copy of all forms and backup information submitted to the executive director for a minimum of five years, following the completion of the generation period. The user shall maintain a copy of all forms and backup information submitted to the executive director for a minimum

of five years, following the completion of the use period. Other relevant reference material or raw data must also be maintained on-site by the participating facilities or mobile sources. The user must also maintain a copy of the generator's notice and backup information for a minimum of five years after the use is completed. The records must include, but not necessarily be limited to:

- (1) the name, emission point number, and facility identification number of each facility or any other identifying number for mobile sources using discrete emission credits;
- (2) the amount of discrete emission credits being used by each facility or mobile source; and
- (3) the certificate number of each discrete emission credit used by each facility or mobile source.
- (k) [(i)] Public information. All information submitted with notices, reports, and trades regarding the nature, quantity of emissions, and sales price associated with the use, or generation of discrete emission credits is public information and may not be submitted as confidential. Any claim of confidentiality for this type of information, or failure to submit all information may result in the rejection of the discrete emission reduction application. All nonconfidential notices and information regarding the

generation, use, and availability of discrete emission credits may be obtained from the registry.

- (<u>l)</u> [(j)] Authorization to emit. A discrete emission credit created under this division is a limited authorization to emit the specified pollutants in accordance with the provisions of this section, the Federal Clean Air Act, and the Texas Clean Air Act, as well as regulations promulgated thereunder. A discrete emission credit does not constitute a property right. Nothing in this division should be construed to limit the authority of the commission or the EPA to terminate or limit such authorization.
- (m) [(k)] Program participation. The executive director has the authority to prohibit a person from participating in discrete emission credit trading either as a generator or user, if the executive director determines that the person has violated the requirements of the program or abused the privileges provided by the program.
 - (n) [(l)] Compliance burden and enforcement.
- (1) The user is responsible for assuring that a sufficient quantity of discrete emission credits are acquired to cover the applicable facility or mobile source's emissions for the entire use period.
- (2) The user is in violation of this section if the user does not possess enough discrete emission credits to cover the compliance need for the use period. If

the user possesses an insufficient quantity of discrete emission credits to cover its compliance need, the user will be out of compliance for the entire use period. Each day the user is out of compliance may be considered a violation.

- (3) A user may not transfer its compliance burden and legal responsibilities to a third-party participant. A third-party participant may only act in an advisory capacity to the user.
- (o) [(m)] Credit ownership. The owner of the initial discrete emission credit certificate shall be the owner or operator of the mobile source creating the emission reduction. The executive director may approve a deviation from this subsection considering factors such as, but not limited to:
- (1) whether an entity other than the owner or operator of the mobile source incurred the cost of the emission reduction strategy; or
- (2) whether the owner or operator of the mobile source lacks the potential to generate one tenth of a ton of credit.

§101.373. Discrete Emission Reduction Credit Generation and Certification.

(a) Emission reduction strategy.

- (1) A discrete emission reduction credit (DERC) may be generated using one of the following strategies or any other method that is approved by the executive director:
- (A) the installation and operation of pollution control equipment that reduces emissions below the baseline emissions for the facility; or
- (B) a change in the manufacturing process, other than a shutdown or curtailment, that reduces emissions below the baseline emissions for the facility.
 - (2) A DERC may not be generated using the following strategies:
- (A) a shutdown or curtailment of an activity at a facility, either permanent or temporary;
- (B) a modification or discontinuation of any activity that is otherwise in violation of a local, state, or federal requirement;
- (C) an emission reduction required to comply with any provision under 42 United States Code (USC), Subchapter I regarding tropospheric ozone, or 42 USC, Subchapter IV-A regarding acid deposition control;

- (D) an emission reduction of hazardous air pollutants, as defined in 42 USC, §7412, from application of a standard promulgated under 42 USC, §7412;
- (E) an emission reduction from the shifting of activity from one facility to another facility at the same site;
- (F) an emission reduction credited or used under any other emissions trading program;
- (G) an emission reduction occurring at a facility that received an alternative emission limitation to meet a state reasonably available control technology requirement, except to the extent that the emissions are reduced below the level that would have been required had the alternative emission limitation not been issued;
- (H) an emission reduction from a facility authorized in a flexible permit, unless the reduction is permanent and enforceable or the generator can demonstrate that the emission reduction was not used to satisfy the conditions for the facilities under the flexible permit;
- (I) that portion of an emission reduction funded through a state or federal program, unless specifically allowed under that program;

- (J) an emission reduction from a facility subject to Division 2, 3, or 6 of this subchapter (relating to Emissions Banking and Trading Allowances; Mass Emissions Cap and Trade Program; and Highly Reactive Volatile Organic Compound Emissions Cap and Trade Program); or
- (K) an emission reduction from a facility without state implementation plan (SIP) emissions if the facility is located in a nonattainment area.
 - (b) DERC baseline emissions.
- (1) For a facility located in an area designated as nonattainment for a criteria pollutant, and the pollutant being reduced is either the same criteria pollutant or a precursor of that criteria pollutant, the baseline emissions may not exceed the facility's SIP emissions. If the pollutant being reduced is not the same criteria pollutant for which the area is designated nonattainment or a precursor of that criteria pollutant, then baseline emissions are limited as specified in paragraph (3) of this subsection.
- (2) The activity and emission rate used to calculate the facility's historical adjusted emissions must be determined from the same two consecutive calendar years[, selected from the ten consecutive years immediately before the emission reduction is achieved].

(A) For point sources, the historical adjusted emissions must be from any two consecutive calendar years from the ten consecutive years immediately before the emissions reduction occurs.

(B) For area sources, the historical adjusted emissions must be from any two consecutive calendar years from the five consecutive years immediately before the emissions reduction occurs unless detailed operational records are available for more than five years. The historical adjusted emissions for an area source may be determined from two consecutive calendar years up to six to ten consecutive years immediately before the emissions reduction is achieved when detailed operational records are available for those years.

- (3) For a facility located in an area that is not designated nonattainment for the criteria pollutant being reduced, or the pollutant being reduced is not a precursor of that criteria pollutant, the historical adjusted emissions must be determined from two consecutive calendar years that include or follow the 1990 emission inventory.
- (4) For emission reduction strategies that exceed 12 months, the baseline emissions are established after the first year of generation and are fixed for the life of each unique emission reduction strategy. A new baseline must be established if the commission adopts a SIP revision for the area where the facility is located.

- (5) For a facility in existence less than 24 months or not having two complete calendar years of activity data, a shorter period of not less than 12 months may be considered by the executive director.
 - (c) DERC calculation.
 - (1) DERCs are calculated according to the following equation.

Figure: 30 TAC §101.373(c)(1) (No change to the figure as it currently exists in TAC.)

(2) For an area source facility sources, the amount of DERCs calculated will be adjusted based on the quality of the data used to quantify emissions. The adjustment will be:

(A) no reduction for the same type of records that are required to be maintained by regulation or authorization for a point source facility operating as a point source or as a component of a point source; or

(B) a reduction of 15% or 0.1 ton, whichever is greater, for records supporting approved alternative methods according to §101.372(e)(1)(E) of this title (relating to General Provisions).

- (3) [(2)] For a facility located in an area designated nonattainment for a criteria pollutant, and the pollutant being reduced is either the same criteria pollutant or a precursor of that criteria pollutant, the sum of the reduction generated under paragraph (1) of this subsection and the total strategy emissions must not be greater than the facility's historical adjusted emissions or SIP emissions, whichever is less.
- (4) [(3)] For a facility located in an area that is not designated nonattainment for the criteria pollutant being reduced, or the pollutant being reduced is not a precursor of that criteria pollutant, the sum of the reduction generated under paragraph (1) of this subsection and the total strategy emissions must not be greater than the facility's historical adjusted emissions.
 - (d) DERC certification.
- (1) An [The] application form specified [designated] by the executive director and signed by an authorized account representative must be submitted to the executive director no later than 90 days after the end of the generation period and no later than 90 days after completing each 12 months of generation.
- (2) A DERC must be quantified in accordance with §101.372(e) [§101.372(d)] of this title (relating to General Provisions). The executive director shall have the authority to inspect and request information to assure that the emission reductions have actually been achieved.

- (3) An application for DERCs must include, but is not limited to, a completed application form signed by an authorized representative of the applicant along with the following information for each pollutant reduced at each applicable facility:
 - (A) the generation period;
 - (B) a complete description of the generation activity;
 - (C) the amount of DERCs generated;
- (D) for volatile organic compound reductions, a list of the specific compounds reduced;
- (E) documentation supporting the activity, emission rate, historical adjusted emissions, SIP emissions, strategy emission rate, and strategy activity;
- (F) <u>for point sources</u> emissions inventory data for [each of] the years used to determine the SIP emissions and historical adjusted emissions;
- (G) the most stringent emission rate for the facility, considering all applicable local, state, and federal requirements;

(H) a complete description of the protocol used to calculate the DERC generated; and

(I) the actual calculations performed by the generator to determine the amount of DERCs generated.

§101.374. Mobile Discrete Emission Reduction Credit Generation and Certification.

- (a) Method of generation.
- (1) Mobile discrete emission reduction credits (MDERCs) (MDERC) may be generated by any mobile source emission reduction strategy that creates actual mobile source emission reductions under this division (relating to Discrete Emission Credit Banking and Trading), and is subject to the approval of the executive director [commission]. The number of years that an emissions reduction strategy can be used to generate MDERCs is limited by the expected remaining useful life of the mobile source except if a capture and control system is used to reduce marine or locomotive mobile source emissions.
 - (2) MDERCs may not be generated from the following strategies:

- (A) that portion of reductions funded through a state or federal program, unless specifically allowed under that program;
- (B) through the transfer of emissions from one mobile source to another mobile source within the same nonattainment area and under common ownership or control; or
- (C) reduction strategies resulting in secondary emissions increases that exceed limits established under state or federal rules or regulations.
 - (b) MDERC baseline emissions.
- (1) Mobile source baseline emissions must be calculated with either measured emissions of an appropriately sized sample for the participating mobile sources using a United States Environmental Protection Agency (EPA)-approved test procedure, or estimated emissions of the participating mobile sources using the most recent edition of the EPA on-road or non-road mobile emissions factor model or other model as applicable.
- (2) The historical adjusted emissions and state implementation plan (SIP) emissions must only include actual emissions that occurred when the mobile source was operating inside a specific nonattainment area.

- (3) The activity data used to calculate mobile source's historical adjusted emissions must be from any two consecutive calendar years from the five consecutive years immediately before the emissions reduction occurs unless detailed operational records are available for more than five years. If these detailed operational records are available and do not demonstrate decreasing use due to vehicle age or inoperability, the historical adjusted emissions for a mobile source may be determined from two consecutive calendar years up to six to ten consecutive years immediately before the emissions reduction is achieved.
- (4) For a mobile source in existence less than 24 months or not having two complete calendar years of activity data, a shorter period of not less than 12 months may be approved by the executive director.
- [(2) Mobile source baseline emissions for each year of the proposed mobile source reduction strategy must be the same as, or lower than, those used or proposed to be used in the state implementation plan (SIP) in which the reduction strategy is proposed.]
- (5) [(3)] Baseline emissions for quantifying MDERCs should include, but not be limited to, the following information and data as appropriate:
- (A) the emission standard to which the mobile source is subject or the emission performance standard to which the mobile source is certified;

- (B) the estimated or measured in-use emissions levels per unit of use from all significant mobile source emissions sources;
 - (C) the number of mobile sources in the participating group;
 - (D) the type or types of mobile sources by model year; and
- (E) the actual activity level, hours of operation, or miles traveled by type and model year.
- (c) MDERC calculation. The quantity of MDERCs must be calculated from the annual difference between the mobile source baseline emissions and the strategy emissions. The MDERC must be based on actual in-use emissions of the modified or substitute mobile source.
- (1) For mobile sources generating credits from a shutdown, the amount of MDERCs generated will be reduced by 15% or 0.1 ton, whichever is greater.
- (2) The amount of MDERCs generated will be adjusted to account for the quality of the data used to quantify the emissions. The reduction will be 15% or 0.1 ton, whichever is greater, for records supporting approved alternative methods according to §101.372(e)(1)(E) of this title (relating to General Provisions).

(3) If the mobile source is subject to an adjustment based on both the reduction strategy being a shutdown and the quality of the data used to quantify the emissions, the total combined reduction will be 20% or 0.1 ton tons, whichever is greater.

(4) If a capture and control system is used to reduce mobile source emissions, the strategy emissions used in the MDERC calculation must include the mobile source emissions that are not captured by the system, any emissions that are not controlled by the system, and any emissions caused by or as a result of operating and moving the system. The initial owner of the MDERCs is the owner or operator of the capture and control system.

(d) Emission offsets. Mobile source reduction strategies that reduce emissions in one criteria pollutant or precursor for which an area is designated as nonattainment or near nonattainment, yet result in an emissions increase from the same mobile source in another criteria pollutant or precursor for which that same area is nonattainment or near nonattainment, must be offset at a 1:1 ratio with discrete emission reduction credits DERCs or MERCs.

(e) MDERC certification.

- (1) A designated application form signed by an authorized account representative must [An MDEC-1 Form, Notice of Generation and Generator Certification of Mobile Discrete Emission Credits, shall] be submitted to the executive director no later than 90 days after the end of the generation period [discrete emission reduction strategy activity has been completed], or no later than 90 days after the completion of each [the first] 12 months of generation. [Submission of the MDEC-1 Form shall continue every 12 months thereafter for each subsequent year of generation.]
- (2) MDERCs will be determined and certified in accordance with §101.372(e) [§101.372(d)] of this title [(relating to General Provisions)] using:
 - (A) EPA methodologies, when available;
 - (B) actual monitoring results, when available;
- (C) calculations using the most current EPA mobile emissions factor model or other model as applicable; or
- (D) calculations using creditable emission reduction measurement or estimation methodologies that satisfactorily address the analytical uncertainties of mobile source emissions reduction strategies. The generator shall collect relevant data sufficient to characterize the process emissions of the affected pollutant and the

process activity level for all representative phases of source operation during the period under which the MDERCs are created or used.

- (3) An application for MDERCs must include, but is not limited to, <u>a</u> <u>completed application form</u> [a completed MDEC-1 Form] signed by an authorized <u>account</u> representative, [of the applicant] along with the following information for each pollutant reduced for each mobile source:
 - (A) the date of the reduction;
 - (B) a complete description of the generation activity;
- (C) the amount of discrete mobile source emission credits generated;
- (D) documentation supporting the mobile source baseline activity, mobile source baseline emission rate, mobile source baseline emissions, and the mobile source strategy emissions;
- (E) a complete description of the protocol used to calculate the discrete mobile source emission reduction generated;

- (F) the actual calculations performed by the generator to determine the amount of discrete mobile source emission credits generated; and
- (G) a demonstration that the reductions are surplus to all local, state, and federal rules and to emissions modeled in the SIP.

§101.376. Discrete Emission Credit Use.

- (a) Requirements to use discrete emission credits. Discrete emission credits may be used if the following requirements are met.
- (1) The user shall have ownership of a sufficient amount of discrete emission credits before the use period for which the specific discrete emission credits are to be used.
- (2) The user shall hold sufficient discrete emission credits to cover the user's compliance obligation at all times.
- (3) The user shall acquire additional discrete emission credits during the use period if it is determined the user does not possess enough discrete emission credits to cover the entire use period. The user shall acquire additional credits as allowed under this section prior to the shortfall, or be in violation of this section.

- (4) The user may acquire and use only discrete emission credits listed in the registry.
- (5) The user shall obtain executive director approval to use nitrogen oxides (NO_x) discrete emission reduction credits (DERCs) in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties as provided by subsection (f) of this section.
- (6) A <u>discrete emission credit</u> [DERC] may not be used unless it is available in the account for the site where it will be used.
- (b) Use of discrete emission credits. With the exception of uses prohibited in subsection (c) of this section or precluded by a commission order or a condition within an authorization under the same commission account number, discrete emission credits may be used to meet or demonstrate compliance with any facility or mobile regulatory requirement including the following:
- (1) to exceed any allowable emission level, if the following conditions are met:
- (A) in ozone nonattainment areas, permitted facilities may use discrete emission credits to exceed permit allowables by no more than 10 tons for NO.

nitrogen oxides or 5 tons for volatile organic compounds in a 12-month period as approved by the executive director. This use is limited to one exceedance, up to 12 months within any 24-month period, per use strategy. The user shall demonstrate that there will be no adverse impacts from the use of discrete emission credits at the levels requested; or

- (B) at permitted facilities in counties or portions of counties designated as attainment or, attainment/unclassifiable, or unclassifiable, discrete emission credits may be used to exceed permit allowables by values not to exceed the prevention of significant deterioration significance levels as provided in 40 Code of Federal Regulations (CFR) §52.21(b)(23), as approved by the executive director before use. This use is limited to one exceedance, up to 12 months within any 24-month period, per use strategy. The user shall demonstrate that there will be no adverse impacts from the use of discrete emission credits at the levels requested;
- (2) as new source review (NSR) permit offsets, if the following requirements are met:
- (A) the user shall obtain the executive director's approval prior to the use of specific discrete emission credits to cover, at a minimum, one year of operation of the new or modified facility in the NSR permit;

(B) the amount of discrete emission credits needed for NSR offsets equals the quantity of tons needed to achieve the maximum allowable emission level set in the user's NSR permit. The user shall also purchase and retire enough discrete emission credits to meet the offset ratio requirement in the user's ozone nonattainment area. The user shall purchase and retire either the environmental contribution of 10% or the offset ratio, whichever is higher; and

[(C) for the use of mobile discrete emission reduction credits, the NSR permit must meet the following requirements:]

[(i) the permit must contain an enforceable requirement that the facility obtain at least one additional year of offsets before continuing operation in each subsequent year;]

[(ii) prior to issuance of the permit, the user shall identify the discrete emission credits; and]

[(iii) prior to start of operation, the user shall submit a completed application form specified by the executive director;]

(C) [(D)] [for the use of DERCs,] the user shall submit a completed application form specified by the executive director at least 90 days before the start of operation and at least 90 days before continuing operation for any period in which

<u>discrete emission credits</u> [DERCs] not included in a prior application will be used as offsets;

- (3) to comply with the Mass Emissions Cap and Trade Program requirements as provided by §101.356(h) of this title (relating to Allowance Banking and Trading); or
- (4) to comply with Chapter 115 or 117 of this title (relating to Control of Air Pollution from Volatile Organic Compounds; and Control of Air Pollution from Nitrogen Compounds), as allowed.
- (c) Discrete emission credit use prohibitions. A discrete emission credit may not be used under this division:
 - (1) before it has been acquired by the user;
- (2) for netting to avoid the applicability of federal and state NSR requirements;
- (3) to meet (as codified in 42 United States Code (USC), Federal Clean Air Act (FCAA)) requirements for:

- (A) new source performance standards under FCAA, §111 (42 USC, §7411);
- (B) lowest achievable emission rate standards under FCAA, §173(a)(2) (42 USC, §7503(a)(2));
- (C) best available control technology standards under FCAA, §165(a)(4) (42 USC, §7475(a)(4)) or Texas Health and Safety Code, §382.0518(b)(1);
- (D) hazardous air pollutants standards under FCAA, §112 (42 USC, §7412), including the requirements for maximum achievable control technology;
- (E) standards for solid waste combustion under FCAA, §129 (42 USC, §7429);
- (F) requirements for a vehicle inspection and maintenance program under FCAA, §182(b)(4) or (c)(3) (42 USC, §7511a(b)(4) or (c)(3));
- (G) ozone control standards set under FCAA, §183(e) and (f) (42 USC, §7511b(e) and (f));
- (H) clean-fueled vehicle requirements under FCAA, §246 (42 USC, §7586);

- (I) motor vehicle emissions standards under FCAA, §202 (42 USC, §7521);
- (J) standards for non-road vehicles under FCAA, §213 (42 USC, §7547);
- (K) requirements for reformulated gasoline under FCAA, $\S 211(k)$ (42 USC, $\S 7545$); or
- (L) requirements for Reid vapor pressure standards under FCAA, $\S211(h)$ and (i) (42 USC, $\S7545(h)$ and (i));
- (4) to allow an emissions increase of an air contaminant above a level authorized in a permit or other authorization that exceeds the limitations of §106.261 or §106.262 of this title (relating to Facilities (Emission Limitations); and Facilities (Emission and Distance Limitations)) except as approved by the executive director and the United States Environmental Protection Agency (EPA). This paragraph does not apply to limit the use of discrete emission credits [DERC or mobile DERC] in lieu of allowances under §101.356 of this title;
- (5) to authorize a facility whose emissions are enforceably limited to below applicable major source threshold levels, as defined in §122.10 of this title

(relating to General Definitions), to operate with actual emissions above those levels without triggering applicable requirements that would otherwise be triggered by such major source status;

- (6) to exceed an allowable emission level where the exceedance would cause or contribute to a condition of air pollution as determined by the executive director; or
- (7) in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties, if the NO_{x} DERC usage requested exceeds the limit specified in subsection (f) of this section.
 - (d) Notice of intent to use.
- (1) A completed application form specified by the executive director, signed by an authorized representative of the applicant, must be submitted to the executive director in accordance with the following requirements.
- (A) Discrete emission credits may be used only after the applicant has submitted the notice and received executive director approval.
 - (B) The application must be submitted:

(i) except as provided in subsection (f)(4) of this section, for NO_x DERC use in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties, by August 1 before the beginning of the calendar year in which the DERCs are intended for use;

(ii) for [DERC] use for the Mass Emissions Cap and Trade
Program in accordance with §101.356 of this title, by October 1 of the control period
in which the DERC are intended for use; or

(iii) for [DERC] use for NSR offsets, as required by subsection $\underline{(b)(2)(C)}$ [(b)(2)(D)] of this section; or

(iv) for all other [discrete emission credit] use, at least 45 days before the first day of the use period if the discrete emission credits were generated from a facility, 90 days if the discrete emission credits were generated from a mobile source, and every 12 months thereafter for each subsequent year if the use period exceeds 12 months.

(C) A copy of the application must also be sent to the federal land manager 30 days prior to use if the user is located within 100 kilometers of a Class I area, as listed in 40 CFR Part 81 (2001).

- (D) The application must include, but is not limited to, the following information for each use:
- (i) the applicable state and federal requirements that the discrete emission credits will be used to comply with and the intended use period;
 - (ii) the amount of discrete emission credits needed;
- (iii) the baseline emission rate, activity level, and total emissions for the applicable facility or mobile source;
- (iv) the actual emission rate, activity level, and total emissions for the applicable facility or mobile source;
- (v) the most stringent emission rate and the most stringent emission level for the applicable facility or mobile source, considering all applicable local, state, and federal requirements;
- (vi) a complete description of the protocol, as submitted by the executive director to the EPA United States Environmental Protection Agency for approval, used to calculate the amount of discrete emission credits needed;

(vii) the actual calculations performed by the user to determine the amount of discrete emission credits needed;

(viii) the date that the discrete emission credits were acquired [or will be acquired];

(ix) the discrete emission credit generator and the original certificate number of the discrete emission credits acquired [or to be acquired];

(x) the price of the discrete emission credits acquired [or the expected price of the discrete emission credits to be acquired], except for transfers between sites under common ownership or control;

(xi) a statement that due diligence was taken to verify that the discrete emission credits were not previously used, the discrete emission credits were not generated as a result of actions prohibited under this regulation, and the discrete emission credits will not be used in a manner prohibited under this regulation; and

(xii) a certification of use, that must contain certification under penalty of law by a responsible official of the user of truth, accuracy, and completeness. This certification must state that based on information and belief

formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(2) Discrete emission credit use calculation.

(A) To calculate the amount of discrete emission credits necessary to comply with §§117.123, 117.320, 117.323, 117.423, 117.1020, 117.1220, or 117.3020 of this title (relating to Source Cap; and System Cap), a user may use the equations listed in those sections, or the following equations.

(i) For the rolling average cap:

Figure: 30 TAC §101.376(d)(2)(A)(i)

[Figure: 30 TAC §101.376(d)(2)(A)(i)]

$$DECs = \sum_{i=1}^{N} [(EH_i \times ER_i) - (H_i \times R_i)] \times \frac{d}{2000}$$

Where:

N = The total number of emission units in the source or system cap.

i = Each emission unit in the source or system cap.

 EH_i = The expected new daily heat input, in <u>million British thermal units</u> (MMBtu) (mmBtu) [MMBtu] per day.

 ER_i = The expected new emission rate, in lb/MMBtu.

 H_i = The actual daily heat input, in million British thermal units (MMBtu) per day, as calculated according to §§117.123(b)(1), 117.320(c)(1) and (2), 117.323(b)(1), 117.423(b)(1), 117.1020(c)(1), 117.1220(c)(1), or 117.3020(c) of this title as applicable.

 R_i = The actual emission rate, in pounds (lb)/MMBtu, as defined in §§117.123(b)(1), 117.320(c)(1) and (2), 117.323(b)(1), 117.423(b)(1), 117.1020(c)(1), 117.1220(c)(1), or 117.3020(c) of this title as applicable.

d = The number of days that emissions are expected to exceed the source or system cap.

(ii) For maximum daily cap:

Figure: 30 TAC §101.376(d)(2)(A)(ii)

[Figure: 30 TAC §101.376(d)(2)(A)(ii)]

$$DECs = \sum_{i=1}^{N} [(EH_{Mi} \times ER_i) - (H_{Mi} \times R_i)] \times \frac{d}{2000}$$

Where:

N = The total number of emission units in the source or system cap.

i = Each emission unit in the source or system cap.

 EH_{Mi} = The expected new maximum daily heat input, in <u>million British thermal units</u> (MMBtu) (mmBtu) [MMBtu] per day.

 ER_i =The expected new emission rate, in lb/MMBtu.

 HM_i = The maximum daily heat input, in MMBtu/day, as defined in §§117.123(b)(2), 117.320(c)(3), 117.323(b)(2), 117.423(b)(2), 117.1020(c)(2), or 117.1220(c)(2) of this title as applicable.

Page 228

 $R_i = \text{In lb/MMBtu}$, is defined as in §§117.123(b)(2), 117.320(c)(3), 117.323(b)(2), 117.423(b)(2), 117.1020(c)(2), or 117.1220(c)(2) of this title as applicable.

d = The number of days in the use period.

(B) The amount of discrete emission credits needed to demonstrate

compliance or meet a regulatory requirement is calculated as follows.

Figure: 30 TAC §101.376(d)(2)(B) (No change to the figure as it currently exists in

TAC.).

(C) The amount of discrete emission credits needed to exceed an

allowable emissions level is calculated as follows.

Figure: 30 TAC §101.376(d)(2)(C)

[Figure: 30 TAC §101.376(d)(2)(C)]

 $DECs = (ELA - PLA) \times (PER)$

Where:

ELA = The expected level of activity.

PLA = The permitted level of activity.

PER = The permitted emission rate per unit activity.

- (D) The user shall retire 10% more discrete emission credits than are needed, as calculated in this paragraph, to ensure that the facility or mobile source environmental contribution retirement obligation will be met.
- (E) If the amount of discrete emission credits needed to meet a regulatory requirement or to demonstrate compliance is greater than 10 tons, an additional 5.0% of the discrete emission credits needed, as calculated in this paragraph, must be acquired to ensure that sufficient discrete emission credits are available to the user with an adequate compliance margin.
- (3) A user may submit a late application in the case of an emergency, or other exigent circumstances, but the notice must be submitted before the discrete emission credits can be used. The user shall include a complete description of the situation in the notice of intent to use. All other notices submitted less than 45 days prior to use, or 90 days prior to use for a mobile source, will be considered late and in violation.
- (4) The user is responsible for determining the credits it will purchase and notifying the executive director of the selected generating facility or mobile source in the application. If the generator's credits are rejected or the application is incomplete, the use of discrete emission credits by the user may be delayed by the executive director. The user cannot use any discrete emission credits that have not been certified by the executive director. The executive director may reject the use of

discrete emission credits by a facility or mobile source if the credit and use cannot be demonstrated to meet the requirements of this section.

- (5) If the facility is in an area with an ozone season less than 12 months, the user shall calculate the amount of discrete emission credits needed for the ozone season separately from the non-ozone season.
 - (e) Notice of use.
 - (1) The user shall calculate:
- (A) the amount of discrete emission credits used, including the amount of discrete emission credits retired to cover the environmental contribution, as described in subsection (d)(2)(D) of this section, associated with actual use; and
- (B) the amount of discrete emission credits not used, including the amount of excess discrete emission credits that were purchased to cover the environmental contribution, as described in subsection (d)(2)(D) of this section, but not associated with the actual use, and available for future use.
 - (2) Discrete emission credit use is calculated by the following equations.

(A) The amount of discrete emission credits used to demonstrate compliance or meet a regulatory requirement is calculated as follows.

Figure: 30 TAC §101.376(e)(2)(A) (No change to the figure as it currently exists in TAC.)

(B) The amount of discrete emission credits used to comply with permit allowables is calculated as follows.

Figure: 30 TAC §101.376(e)(2)(B) (No change to the figure as it currently exists in TAC.)

- (3) A form specified by the executive director for using credits must be submitted to the <u>executive director</u> [commission] in accordance with the following requirements.
- (A) The notice must be submitted within 90 days after the end of the use period. Each use period must not exceed 12 months.
- (B) The notice is to be used as the mechanism to update or amend the notice of intent to use and must include any information different from that reported in the notice of intent to use, including, but not limited to, the following items:

(i) purchase price of the discrete emission credits obtained prior to the current use period, except for transfers between sites under common ownership or control;

(ii) the actual amount of discrete emission credits possessed during the use period;

(iii) the actual emissions during the use period for volatile organic compounds and NO_{\(\bigve{n}\)} nitrogen oxides;

- (iv) the actual amount of discrete emission credits used;
- (v) the actual environmental contribution; and
- (vi) the amount of discrete emission credits available for future use.
- (4) Discrete emission credits that are not used during the use period are surplus and remain available for transfer or use by the holder. In addition, any portion of the calculated environmental contribution not attributed to actual use is also available.

- (5) The user is in violation of this section if the user submits the report of use later than the allowed 90 days following the conclusion of the use period.
- (f) DERC use in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties.
- (1) For the 2015 calendar year, the use of NO_x DERCs in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties may not exceed 42.8 tons per day.
- (2) Beginning in the 2016 calendar year, the use of NO_x DERCs in Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties may not exceed 17.0 tons per day.
- (3) If the total number of DERCs submitted for the upcoming calendar year in all applications received by the August 1 deadline in subsection (d)(1)(B)(i) of this section is greater than the applicable limit in paragraph (1) or (2) of this subsection, the executive director shall apportion the number of DERCs for use.
- (A) In determining the amount of DERC use to approve for each application, the executive director may take into consideration:

operators are requesting use of DERCs.

- (i) the total number of DERCs existing in the nonattainment area bank; (ii) the total number of DERCs submitted for use in the upcoming control period; (iii) the proportion of DERCs requested for use to the total amount requested; (iv) the amount of DERCs required by the applicant for compliance; (v) the technological and economic aspects of other compliance options available to the applicant; and (vi) the location of the facilities for which owners or
- (B) The executive director shall consider the appropriate amount of DERCs allocated for each application submitted on a case-by-case basis.

- (4) If the total number of DERCs submitted for use during the upcoming calendar year in all applications received by the August 1 deadline in subsection (d)(1)(B)(i) of this section is less than the limit, the executive director may:
- (A) approve all requests for DERC usage provided that all other requirements of this section are met; and
- (B) consider any late application submitted as provided under subsection (d)(3) of this section that is not an Electric Reliability Council of Texas, Inc. (ERCOT)-declared emergency situation as defined in paragraph (5) of this subsection, but will not otherwise approve a late submittal that would exceed the limit established in this subsection.
- (5) If the applications are submitted in response to an ERCOT-declared emergency situation, the request will not be subject to the limit established in this subsection and may be approved provided all other requirements are met. For the purposes of this paragraph, an ERCOT-declared emergency situation is defined as the period of time that an ERCOT-issued emergency notice or energy emergency alert (EEA) (as defined in ERCOT Nodal Protocols, Section 2: Definitions and Acronyms (June 1, 2012) and issued as specified in ERCOT Nodal Protocols, Section 6: Adjustment Period and Real-Time Operations (June 1, 2012)) is applicable to the serving electric power generating system. The emergency situation is considered to end upon expiration of the emergency notice or EEA issued by ERCOT.

(g) Inter-pollutant use of <u>discrete emission credits</u> [DERCs]. With prior approval from the executive director and the EPA, a NO_x or VOC <u>discrete emission credit</u> [DERC] may be used to meet the <u>nonattainment new source review NNSR</u> offset requirements for the other ozone precursor if photochemical modeling demonstrates that overall air quality and the regulatory design value in the nonattainment area of use will not be adversely affected by the substitution.